The Prediction and Prevention of Relationship Distress and Divorce

Brigit Monica van Widenfelt

The prediction and prevention of relationship distress and divorce

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Brigit Monica van Widenfelt
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Promotor:	Professor Dr. C. van der Staak
Co-promotors:	Professor Dr. C. Hosman Dr. C. Schaap Catholic University of Nijmegen, the Netherlands
Manuscript commission:	Professor C. A. L. Hoogduin, MD, PhD Catholic University of Nijmegen, the Netherlands Professor G. J. Kok, PhD Rijks Universiteit Limburg, the Netherlands Professor C. I. Notarius, PhD Catholic University of America, Washington, DC

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Dedicated to:

my husband, Edwin de Beurs

And to those who have mentored me in the study of couple relationships:

Howard Markman, Cliff Notarius, Cas Schaap, and Fred Wamboldt

Usually voyages begin with great optimism and hope. It is as if a majestic sailing ship sets off on a bright blue day and all spirits run high. the ship hums with excited business, gear is stowed aboard, provisions are laid in, lines secured, lists are checked and rechecked, and, finally, the anchor is weighed, the sails are raised and fill with wind, the prow begins cutting the crystal waters, and she moves out gracefully. So most marriages begin with a great celebration and with great expectations.

But on these voyages, no sailor expects the storm, and none is trained to deal with the gales. There were no prior man-overboard drills. We are prepared only for the bright sunrises accompanied by the horn section of the orchestra singing our joyful gladness. We are prepared for the violins to accompany our romantic sunsets, and perhaps for the cellos to accompany our tender pathos.

So marriages begin as great journeys filled with faith or at least hope. Yet inevitably the gales come. We find that our ship does not perform perfectly. We are disappointed. Ingenuity is required, improvisation, and even work. Then come the storms, and the boat begins to leak. We wail as we repair it and continue all the while at breakneck speed on the journey. We become exhausted, and at times the orchestra is replaced by a lone oboe. Sometimes the sea seems vast, the gray clouds merge with the gray sea, and the waves are menacing, as if marriage were a powerful, relentless adversary. The waters may enter the boat faster than we can bail.

Yet people regroup. The sky eventually clears, the sun rises again, sails are repaired, and a small voice inside begins tentatively to sing again. The trials make the story more interesting and it becomes a tale of a real journey.

by John Gottman (1994)

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My warmest feelings go out to my husband, Edwin de Beurs for standing by my side throughout the completion of this work. I am grateful to you for always being there when I needed you. Thank you for the computer and statistical assistance, and the reading of many drafts. Thank you too for offering me distraction from my obsession with this project and reminding me 'there's more to life than this'. Taking you along through the producing of two dissertations put a few holes in the boat, but I think we are ready to repair them. I see the sky clearing and the sun rising. I love you.

PREFACE

This dissertation is an attempt to bring together two research traditions, the study of communication in marriage by Dr. Cas Schaap and of the science of prevention by Dr. Clemens Hosman in the Department of Clinical Psychology and Personality at the University of Nijmegen in the Netherlands, and thereby advance knowledge in understanding relationship distress and divorce and the possibilities for prevention. The dissertation is also rooted in the work of several of my previous mentors, the study of gender differences in communication and observation of couple interactions by Dr. Clifford Notarius of the Catholic University of America, the evaluation of prevention of relationship distress and divorce by Dr. Howard Markman at the University of Denver and the study of family of origin by Dr. Fred Wamboldt at National Jewish Center for Immunology and Respiratory Medicine in Denver, Colorado. Their work is reflected in the thinking and development of this project.

The manuscript is divided into three parts. Part I titled, *Literature background, research questions and method* provides the reader with an overview of relevant literature and a description of the studies conducted. More specifically, it consists of a literature overview (Chapters one and two), a description of the research questions and hypotheses (Chapter three), and the method used (Chapter four). Chapter one begins with the rates of divorce in the Netherlands, an overview of the literature on relationships and health of partners and offspring, and ends with a description of theories and models that attempt to explain the processes of relationship distress and divorce.

Part II titled, *Communication, relationship quality and gender,* consists of two reports. In Chapter five a study on the relationship between gender, communication, and relationship satisfaction is described. Chapter six reports on

the cross cultural reliability and validity of a measure of relational efficacy called the Marital Agendas Protocol.

Part III, titled *Risk and prevention,* is made up of three chapters. Chapter seven describes an empirical report of the relationship functioning of adult children of divorce and their partners. Both self-report and observational measures were used to study aspects of relating. In Chapter eight the preventive intervention is described. A brief overview of each session is given as well as how the program was implemented. The results of the empirical evaluation of the preventive intervention for couples is reported in Chapter nine. A nine month and two year follow-up, using self-report measures is reported on.

Finally, the manuscript concludes with an overview and discussion of the main findings of the studies. Note, some of the text in this manuscript describing the method is repeated in more than one chapter. I apologize for the repetitiveness in the method sections to the reader that reads the entire manuscript. It was intended that each chapter could be read without any of the other chapters for the purpose of submitting to journals.

CONTENTS

PART I

LITERATURE BACKGROUND, RESEARCH QUESTIONS, AND METHOD

Chapter 1

Relationships and well-being

Chapter 1 begins with a demographic picture of relationship stability in the Netherlands. Next, the literature on relationship adjustment and health in partners and offspring is briefly reviewed. Lastly, theoretical models of relationship functioning are presented.

RELATIONSHIP STABILITY

The current divorce rate in the Netherlands is 30% of all marriages (Central Bureau of Statistics, 1988). The divorce rate has increased considerably over the last several decades, averaging in the last years in the Netherlands at just under 30,000 per year (Tas, 1989). De Jong (1989) reports that one in six children in the Netherlands will experience the divorce of their parents. This rate has risen steadily over the last 25 years, from 39,000 children in the beginning of the sixties to 158,000 children by the end of the eighties (Tas, 1989).

In Europe, divorce rates are generally lower than in the US (see Goode, 1993 for an overview of divorce rates in Europe). As mentioned above, in the Netherlands, the divorce rate is much lower than in the United States (approximately 30% compared to about 50% in the US) (Central Bureau of Statistics, 1988; National Center for Health Statistics, 1990). These numbers could indicate divorce and marital problems are less frequent in Europe than in the US, yet this conclusion cannot be drawn. In comparison to the US, divorce rates in the Netherlands underestimate the extent of relationship dissolution as they do not include the break up of couples that are living together. This is important to keep in mind as not only in the Netherlands, but in the whole of Europe rates of cohabitation are higher than in the US (Buunk & van Driel, 1989). Goode (1993) describes the increase in cohabitation in Europe as a radical shift in family behavior. Furthermore, in contrast to the US, in some countries cohabitors have achieved the same respect and status as legally married couples; in the Netherlands this has been almost completely realized. It is estimated that by the year 2000, 30% of Dutch couples will be cohabiting (Buunk & van Driel, 1989). Many cohabitors do eventually marry in the Netherlands. The difference between the American marital bond and the Dutch one is perhaps more one of timing, that is, in Holland couples are more likely to first live together and than marry once they have children (Central Bureau of Statistics, 1991), whereas in the US couples are more likely to first marry and then have children.

In addition to current 'divorce rates' not reflecting the break up of cohabitors, they also do not reflect distressed marriages that do not break up. Klem, Frenken, and Vennix (1983) report 50% of Dutch couples are unhappy with their relationship, many of whom have considered divorce. Nor are couples reflected in 'divorce rates' who are separated, whom are estimated to

have a 75% chance of ending up divorced (Bloom, Hodges, Caldwell, Systra, & Cedrone, 1977). Furthermore, 'divorce rates' do not reflect that some of those who divorce are doing so for the second or third time: those who remarry after divorce have an even greater chance of divorcing than first marriages (Glick, 1984).

In my view, the statistics are quite discouraging. However, many Dutch students have asked me when I explained the objectives of this project: "What is wrong with divorce?" Their question perhaps reflects the greater acceptance of divorce in the Netherlands in recent years. It is an important question and in the following section the literature on the association between distressed or broken relationships and the health of partners and offspring is reviewed.

RELATIONSHIP ADJUSTMENT, STABILITY AND HEALTH

Studies indicate that in general married persons benefit from greater health and well-being than unmarried persons (single, divorced or widowed) (e.g., Bebbington, 1987; Hirschfield & Cross, 1981; Verbrugge, 1979). In fact, married persons show lower mortality rates than unmarried persons and appear to have a better chance of survival if they have a diagnosed disease (e.g., Goodwin, Hunt, Key, & Samet, 1987). Marriage may serve as a buffer or a protective barrier to the harmful consequences of life strains (Pearlin & Johnson, 1977). Though, in a review of the literature of marriage and physical health, Burman and Margolin (1992) conclude that this relationship is indirect and nonspecific. In contrast to the health benefits of a happy marriage, a distressed and conflictual marriage or the break up of a marriage can have a negative effect on well-being as indicated in the following.

Physical health

Kiecolt-Glaser, et al. (1987; 1988) found poorer marital quality to be predictive of poorer responses on specific immune functioning measures for both males and females. In a more recent study, Kiecolt-Glaser, et al. (1993) also report more negative or hostile behavior of partners during a marital problem discussion was associated with down-regulated immune function, especially in women. Levenson and Gottman (1983; 1985) examined the relationship between marital quality, marital interaction and physiological arousal and reported a relationship between expression of negative affect and physiological arousal.

During high conflict discussions, subjects demonstrated greater physiological responses (e.g., heart rate). Interestingly, the more aroused couples were at Time 1, the more their marital satisfaction had declined at Time 3.

Psychological health

A relationship between psychopathology and marital distress and divorce has been established as well (see Gotlib & McCabe, 1990; Halford & Sanders, 1989; Lange, Schaap, & Van Widenfelt, 1993 for reviews). For instance, studies show a relationship between marital distress and depression (see Coyne, Kahn, & Gotlib, 1987). Several studies even indicate that marital problems may even precede depression (see Whisman & Jacobson, 1989). Furthermore, relapse for persons treated for depression is more likely for those returning to distressed marriages (Hooley, 1986). A relationship has been found between marital distress and alcoholism as well (see Schaap, Schellekens, & Schippers, 1991). Marital violence is also more likely among distressed couples (O'Leary & Vivian, 1990), especially when alcohol is being abused (Murphy & O'Farrell, 1994).

Young offspring

In addition to negative effects on partners, a relationship between marital discord and divorce and child outcome has also been established. Numerous studies indicate that children who have been exposed to marital conflict and/or divorce are less well adjusted and have more social, emotional, behavioral and learning problems than children from intact or low conflict families, both in the short and long term (Amato & Keith, 1991; Grynch & Fincham, 1992; Hetherington & Clingempeel, 1992). The most consistent and well documented finding is that the adjustment of young children exposed to marital conflict and/or divorce is often characterized by an increase in externalizing problems (including aggression, conduct disorder) compared to children of intact families (Camara & Resnick, 1988; Hetherington, Cox, & Cox, 1982). Children of divorce and/or interparental conflict have also been reported to have trouble with internalizing behavior, such as, depression, anxiety and withdrawal, and to have greater difficulties in interpersonal relations than children from intact families (Hetherington et al., 1982). In terms of interpersonal relating, young children have been reported to have difficulty with peer relations, whereas adolescents are reported to have difficulty with heterosexual intimate relations.

Some studies report that exposure to conflict has more serious consequences for offspring than the divorce itself (Emery, 1982; 1988). For example, Forehand, McCombs, Long, Brody and Fauber (1988) studied adolescents a year after their parents divorced and found exposure to conflict to be more related to social/behavioral problems than divorce.

Adult offspring

Marital distress and divorce have also been found to be related to outcome in adult offspring. A meta-analysis by Amato and Keith (1991) on the effects of parental divorce on adult offspring, indicates that adults of parental divorce exhibit lower psychological well being, make more use of mental health services, report lower marital quality, are more likely to be a single parent (especially males) and are more likely to separate or to divorce (especially females) than adults from intact families. It should be noted that though present, the effect sizes are not that large and results tended to depend on samples studied. That is, clinical studies showed more negative effects than for nonclinic samples. Overall, studies on national samples in the Netherlands and in the USA offer evidence that persons from divorced families are more likely to divorce or separate from their partners than persons from intact families (De Graaf, 1991; Glenn & Kramer, 1987; Mueller & Pope, 1977). See Chapter 7 for a brief review of the literature on the effect of parental divorce on adult offspring.

In sum, the literature review on the effects of marital distress and break up reveals a series of negative outcomes for partners and offspring. A pattern in the literature exists indicating a relationship between relationships and health and the intergenerational transmission of psychological and relationship distress and break up (See Figure 1.1). Further research is needed to better understand the processes involved that lead to relationship distress and divorce.

THEORETICAL MODELS FOR THE PRESENT STUDY

From the above overview, it can be concluded that marital distress and divorce have numerous negative psychological and physical consequences for partners and offspring. A primary focus of the present dissertation is to better understand the processes related to marital distress and divorce in couples, including the intergenerational transmission of such processes. A second aim of the present research is to evaluate a preventive intervention, aimed at changing

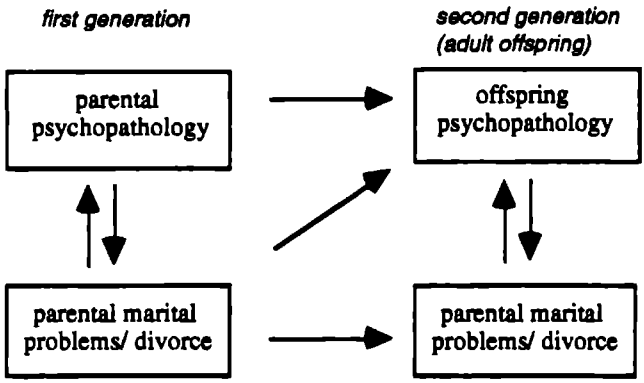

Figure 1.1 Intergenerational transmission of relationship distress and divorce

maladaptive patterns linked to future distress and divorce with the hope to lower a couple's risk of becoming relationally distressed or breaking up.

There are several theoretical models that serve as the underlying basis for understanding and studying the process of relationship distress and divorce. In the following the relevant constructs of these theoretical models are briefly sketched. This is done to put the current study in it's place in a larger framework and to provide it with a foundation. More comprehensive presentations of the theoretical models underlying the study are found in most textbooks on marriage.

According to *Social Learning Theory* (Bandura, 1977), behavior in relationships is learned through imitating observed models, and is shaped through reinforcement and punishment of partners or parents. Bandura also emphasizes the importance of the expectancies a person has about the probability a certain outcome will result from certain behavior.

Couples and family members are constantly engaged in patterns of influence. Differences in behavior can be viewed as the result of different learning histories, that is, different learning conditions that individuals experience during their upbringing. It may be that the patterns in a relationship develop from a learning history rooted in earlier interactions in childhood as well as in the relationship itself. In Chapter 7, a study is done describing the relationships of adult's who experienced parental divorce (PD) and their partners. (Because PD adults are studied in the context of an intimate

relationship, their data and their partner's is considered interdependent.) By coming from a home of divorce, it was hypothesized that PD adults were exposed to poor relationship skills of their parents, thus PD adults may not have learned the skills needed to maintain an intimate relationship and manage conflict associated with having a relationship. Furthermore, having experienced parental divorce, it was expected that PD adults would have a lower sense of relational efficacy (lower outcome expectancies) for being able to resolve relationship issues. Relational efficacy is also studied in Chapter 6.

Chapter 5 reports on the study of the relationship between communication patterns, gender and marital distress and is rooted in Social Exchange Theory and Systems Theory. According to *Social Exchange Theory* (Thibaut & Kelley, 1959), individuals are viewed as trying to obtain the greatest gains or rewards in a relationship with the least costs. To gain rewards, individuals reward others. Satisfaction with the relationship is seen as directly related to the ratio of benefits received. Gottman (1979) describes the "bank account model" in which individuals are viewed as making an attempt to maintain a balance between what they put in and take out of the account (the relationship) and to avoid getting into debt (marital distress and divorce). In this model, Jacobson and Margolin (1979) view marital distress as a result of partners exchanging too few positive and too many negative behaviors. Thus, happier couples are assumed to have a greater ratio of positive to negative exchanges (Jacobson, 1984). Gottman (1994) finds the simple constructs of negativity and positivity of importance for marital stability as well. Based on his research findings, he propose a Balance Theory of Marriage, suggesting that couples that regulate a balance between positivity and negativity fare better than couples that he calls "unregulated", who are not balanced on these dimensions (weighing heavier on the negatives) and are more likely to dissolve their marriage. Gottman stresses that not all negative behaviors are created equally, with criticism, contempt, defensiveness and stonewalling carrying more weight.

In *Systems Theory* (Bateson, Jackson, Haley, & Weakland, 1956; Lederer & Jackson, 1968) behaviors of individuals are studied in relation to the behavior of others. Partners behaviors are regulated through feedback processes in terms of circular causality. That is, each partner's behavior is simultaneously the cause and effect of the behavior of the other (Steinglass, 1978). The systems approach is rooted in *General Systems Theory* (von Bertalanffy, 1962) and was introduced to the marital and family field by the Palo Alto Group (Foley, 1974). The

continuous and circular influence between marital partners is also referred to as reciprocity (Gottman, 1979). Positive reciprocity is the likelihood of a positive response given a positive stimulus is greater than the unconditional probability of positive behaviors. The same holds for negative reciprocity, which is the likelihood of a negative response given a negative stimulus is greater that the unconditional probability of negative behaviors (Margolin & Wampold, 1981). In Chapter 5, sequential analysis of the data is reported on, revealing the patterns of communication behavior found.

In addition to the above theories of explaining relationship processes, Gottman (1994) presents a model to explain marital stability and dissolution, which is also relevant to the present line of research. His ideas are based on his extensive study of couples. He proposes the following trajectory toward marital dissolution: marital unhappiness for some time leads to serious consideration of break up, then separation and finally divorce. Gottman also points out that there is not one type of successful or failed marriages, and similar to Fitzpatrick (1988) and Schaap (Buunk, Schaap, & Prevoo, 1990; Schaap & Van Widenfelt, 1990a), he offers a typology of marriage. He describes three types of stable couples: (1) the volatile couple, characterized by high emotional expressiveness; (2) the conflict-avoiding couple, low in emotional expressiveness and conflict engagement; and (3) the validating couple, which falls in between. These are similar to Fitzpatrick's "traditionals', "independents", and "separates". Traditionals are described as avoiding conflict and sticking to traditional gender roles. Independents, like the 'volatile couple', engage in conflict and expression of feelings. They also place value on having privacy and independence in the relationship. The separates are conflict avoiders. Each of these types of relationships, function in a way that ensures stability. Schaap describes conflict engagers, conflict avoiders, and mixed: each pattern ensuring stability but also at risk for instability. For those at risk for dissolution, Gottman identifies several patterns of interacting: contempt, defensiveness and withdrawal. As mentioned above, the couples at risk for dissolution are those that are "unregulated", weighing heavier on negative behaviors: he calls them "conflict avoiders' and "hostile detached".

CONCLUSION

In this chapter, the high rates of relationship distress and divorce and their negative consequences have been outlined. Relationship distress and divorce are associated with a number of negative health outcomes for partners and offspring. These findings are persuasive for the need for research on understanding and preventing marital distress and divorce. Several theories that serve as a basis for the studies of this dissertation are highlighted. In the following chapter, a preventive approach to relationship distress and divorce is described.

Chapter 2

Prevention of relationship distress and divorce

After clarifying several relevant terms in prevention work, arguments in favor of prevention are presented, highlighting the place of relationship health promotion in the current health system. Next, a window is provided into the development and implementation of the prevention program evaluated in the present study, including a description of selecting couples at risk for relationship distress and dissolution, and reviewing the clinical and research literature for risk factors that could be translated into program targets Lastly, we focus on a set of pragmatic issues, including practical experience of researchers and clinicians, on the costs of programs, recruitment and training issues, and research standards.

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INTRODUCTION

Prevention of relationship distress and promotion of relationship health is increasingly recognized as an essential element of research on relationships and the current mental heath care system (Bond & Wagner, 1988). Having satisfying relationships is considered a significant aspect of mental health. Prevention research and interventions offer possibilities for reducing the staggering social, emotional and economic costs related to relationship distress and dissolution (Coie et al., 1993). The growing literature on prevention and effectiveness of prevention programs is offering new knowledge that can be used to improve the quality and success rate of preventive interventions.

Despite the negative consequences associated with relationship distress and divorce described in Chapter 1, in the Dutch mental health system prevention programs only incidently focus on directly preventing relationship distress and divorce. Outside of the mental health system, there is a tradition in Holland of prevention programs for couples offered by the clergy and church or synagogue-affiliated groups (Derksen & Straver, 1977; Pieper, 1988). These programs are typified by a focus on the religious values of the couple and the marriage ceremony itself. Thus, though it is likely in such a program that the commitment of couples is strengthened, it is unlikely that couples will be inocculated with the skills to handle future marital problems. Programs offered in churches are also limited in reaching the majority of couples, as a very high percentage of young couples in the Netherlands today do not take part in organized religion. Thus, an evaluation of a prevention program for couples in the Netherlands based on the State of the Art literature is needed.

The current knowledge base on the determinants of healthy relationships is quite extensive, providing a good foundation for developing, implementing and evaluating a preventive intervention. Prevention literature in the area of marriage and health, has steadily increased over the years (i.e., Bond & Wagner, 1988). A chapter on prevention is now common in overview books of marital research and intervention (i.e., Fincham & Bradbury, 1990; Jacobson & Gurman, 1986). A symposium on prevention of relationship distress and dissolution is also common at major conferences on behavior therapy (i.e., Association for Advancement of Behavior Therapy; World Congress of Behaviour Therapy). Further, a number of existing journals focusing on marital and other intimate

relationships provide a wealth of studies that can serve as a basis for prevention work (i.e., *Family Process, Family Relations, Journal of Family Psychology, Journal of Marriage and the Family, Journal of Social and Personal Relationships*). Lastly, clinical experience and research with distressed couples serve as an excellent information base on how to develop and improve preventive interventions.

CLARIFYING TERMS: PROMOTION VERSUS PREVENTION

The terms promotion and prevention are both used in this chapter. Promotion efforts are usually directed at populations without defined risk, though there is considerable overlap with prevention efforts which are primarily aimed at risk groups, as in the present study. We conceptualize promotion and prevention as lying on the same continuum. In the following section we attempt, nonetheless, to separately define promotion and prevention for the reader. However, it should be noted that in the literature both terms are used interchangeably to encompass the entire field of influencing health determinants and quality of life.

The term health *promotion* is a term that was originally introduced by the World Health Association (WHO) in the 1980s. The term is defined as, "the process of enabling individuals and communities to increase their control over the determinants of health, and thereby to improve their health" (de Leeuw, 1989). Under health promotion various complementary approaches are included: health education, facilitation and regulation, advocacy, enabling and mediating health, building public health policy, creating supportive environments, strengthening community action, developing personal skills, reorientation of health services and development of public commitment to health promotion (WHO, 1985). Such approaches focus on the population in general or large segments of the population. The specifications of the WHO health policy can be found in an ambitious international program titled, "Health for all by the year 2000." In sum, the concept of health promotion is characterized both by a focus on health instead of on illness, and on the control of and improvement of health by influencing the main determinants of health. Health promotion emphasizes strengthening the general (nonspecific) determinants of health to increase the quality of health. Thus, health is improved by improving the general conditions of health. A satisfying relationship can be considered such a condition.

In contrast to health promotion, in *prevention*, the goal is to decrease the incidence or prevalence of specific disorders. Reasoning backwards, one searches for disease-specific risk factors and develops interventions to influence those risk factors. Since, several mental disorders could have risk factors in common, referred to as nonspecific risk factors, it could be more cost-effective to target preventive interventions at influencing nonspecific risk factors. Even in such a case, however, the goal is still disease prevention. Having a healthy satisfying intimate relationship can be considered as the absence of a disorder (that is, absence of severe relationship distress or divorce) and as the absence of a risk factor for other disorders, such as major depression.

The term *prevention* is usually further differentiated into primary, secondary and tertiary prevention. In this chapter we restrict ourselves to a focus on primary and secondary prevention. Tertiary prevention is frequently considered as treatment or therapy, aimed at reducing the serious consequences of a disorder.

Primary prevention seeks to (a) prevent the development of a disorder and (b) to promote well-being with the purpose of preventing dysfunction (Cowen, 1983). Interventions targeted at nondistressed couples would be the focus of primary preventive efforts. In contrast to primary prevention, secondary and tertiary prevention focus on existing dysfunction or distress.

It is important to note here that a common misconception is that interventions targeted at persons identified at risk (thus presenting risk indicators or risk factors) only applies to secondary prevention, whereas it actually can also be applied to primary prevention. An example of this is the risk group identified in the present study: "adults who experienced parental divorce and their partners" who could be labeled at risk for relationship distress and dissolution based on their background, yet do not show symptoms or indications of distress or plans for breaking up currently: They would fall under primary prevention. If they were, however, showing signs of relationship dysfunction currenlty, then they would fall under a risk group for secondary prevention.

The aim of *secondary prevention* is to decrease the duration and severity of a disorder. Signs of the disorder or dysfunction are detected as early as possible and an intervention is offered. As indicated in the previous example, intervening with couples that are already showing signs of relationship distress (i. e., based on questionnaire scores) would fall under the label secondary prevention. Critical to secondary prevention is that it addresses already evident dysfunction (Cowen,

1983). Though the distinguishing factor between the types of prevention is the presence of symptoms, the difference between secondary and primary prevention is sometimes controversial. One reason is that symptoms of distress may be considered both a normal fluctuation in relationships as well as an indication of the development of serious relationship problems.

ARGUMENTS IN SUPPORT OF PREVENTIVE INTERVENTIONS

Rates and consequences of relationship distress and divorce

As described in Chapter 1, rates of relationship distress and divorce are quite high and are associated with a number of negative effects on partners and offspring. This in itself is the strongest case made in support of evaluating the potential of prevention programs to lower the chance of relationship distress and break-up.

Limitations of couples therapy

The goal of primary prevention, in contrast to that of therapy, is to lower the incidence of a disorder. A primary preventive intervention thus differs from a therapeutic intervention in that the goal is to reduce the probability of new cases in the future. The goal of primarily prevention of relationship distress and dissolution is also to prevent related future physical and emotional distress in partners and offspring.

An argument used in favor of prevention (versus therapy) lies in the limited success of couples therapy. Cognitive-Behavioral Couples Therapy (C-BCT) (also referred to as BMT, C-BMT, or BCT) is claimed to be one of the more successful forms of couples therapy and is certainly the best researched. Although C-BCT has been found to be more effective that no therapy (Hahlweg & Markman, 1988), a substantial number of couples who have received C-BCT do not attain the levels of satisfaction reported by nondistressed couples. Thus, even after receiving C-BCT, many couples remain somewhat unsatisfied with their relationship (Hahlweg & Markman, 1988). Furthermore, after initial gains, relapse is quite common (Jacobson, Schmaling, & Holtzworth-Munroe, 1987).

To address the limitations of C-BCT, researchers have done a number of recent studies focused on enhancing current C-BCT treatment elements with several other treatment components including more cognitive components (Baucom & Epstein, 1990), a greater focus on emotional expressiveness (Baucom,

Sayers, & Sher, 1990), affect exploration (Greenberg & Johnson, 1988; Snyder & Wills, 1989), as well as focusing on generalization of change (Behrens, Sanders, & Halford, 1990; Halford, Gravestock, Lowe, & Scheldt, 1992).

Despite the expected improvements to basic C-BCT approaches of these various additions, superior effects for the most part have not been found (Baucom et al., 1990; Halford, Sanders, & Behrens, 1993). In response to these disappointing results several new directions to improve the success of couples therapy have been suggested by researchers: increase greater acceptance of partner (versus focusing only on changing behavior) (Jacobson, 1992), more insight oriented therapy (Greenberg & Johnson, 1988) and more focus on individual self-regulatory or self-control procedures (Halford, Sanders, & Behrens, 1994; Schaap, Hoogduin, Van Widenfelt, & Streik, 1992).

Despite our guarded optimism about these new efforts, we also want to champion an alternative and complementary avenue of research -- the investigation of the effect of promoting relationship health *before* couples become distressed. Or, if put in prevention terms: to investigate the effect of preventing relationship distress and dissolution by teaching couples what is necessary to maintain a healthy relationship. Intervening early on may be a more successful point of intervention for reducing high levels of relationship distress and dissolution than at a later stage when negative patterns have stabilized. That is, from a prevention perspective, it is likely easier for couples with none or mildly negative relationship patterns to bring about change and feel efficacious in their relationship, than those couples who have more severe relationship problems. To date, no longitudinal research has been conducted comparing interventions at these two points in time of relationship development, however. Ideally, continued evaluations are needed for both preventive interventions with non to mildly distressed couples, as well as therapeutic interventions for couples in advanced stages of relationship distress.

One of the binds for obtaining money for evaluating prevention programs is that given the limited funding for mental health research and treatment, investing more money in prevention may mean a reduction of services available for those in need of treatment. The long term goal of preventive interventions is to augment available treatment programs in aiming to reduce the number of people that will be in need of therapeutic interventions. By decreasing the number of couples that need treatment, professionals may be better able to serve those couples who are extremely distressed and most in need.

This is a worthy goal in itself as therapy is an extremely costly level of intervention, and is characterized by the most suffering. However, limited funding may leave little money for testing out the effects of prevention on reducing the need for therapy.

Reaching couples who do not seek therapy

A next argument made in favor of prevention versus therapy is summarized by George Albee (1990), who argues that therapy is futile in that it is available for only a small group in the population and it will not have an effect on lowering the incidence in general of a disorder (in this case relationship distress and dissolution.) Given the high costs of psychotherapy, availability of psychotherapy is largely restricted to the middle and upper class, despite the findings of epidemiological studies that social and emotional disorders are most prevalent among the poor (Albee, 1990).

In addition to the lack of therapists available, Bradbury and Fincham (1990) also raise a point in support of prevention that most couples experiencing relationship distress do not seek professional help. Some couples may fear that treatment may do more harm than good. Additionally, some fear that the therapist will intrude into their private life. Finally, there are strong barriers for seeking therapy, since many people are afraid of becoming stigmatized as mentally ill. Prevention, with its stress on education rather than treatment, or on wellness instead of illness, and because it is not necessary to deliver programs with professionals, it is believed to be less likely to provoke these kind of fears; though no research has been conducted to test out this assumption. Ideally, if a preventive/ promotion approach is more acceptable to couples than therapy, it could alleviate relationship distress that would otherwise remain untreated. By reducing the barriers to receiving professional help, it is likely that more couples will be reached. Realistically prevention programs are also likely to share some of the barriers that couples therapy efforts face, as well as others. These are further discussed in a later section of this chapter, titled pragmatic issues.

Costs of treatment versus prevention and promotion

It is assumed that implementing prevention and promotion efforts prior to or in the early stage of relationship distress is more cost efficient than to implement a therapeutic intervention in a more advanced stage. Intervening with nondistressed couples requires less training on the part of the mental

health worker than treating distressed couples. Prevention programs can therefore be delivered by para-professionals, clergy, mental health workers of various levels of training, or students, whereas treating distressed couples with couples therapy requires a higher degree and a license, and is thus more expensive. A second reason it is assumed that prevention is cheaper to deliver is that the intervention itself is less intensive (less sessions) than therapy. Ideally, participation in prevention may also reduce the use of therapeutic intervention at a later date. Data has not yet been analyzed, however, to calculate the average cost of preventive and therapeutic interventions across the couple lifespan.

A word of caution

Though the costs of preventing relationship distress have not been calculated, it is believed that they are much less than the costs of relationship distress and dissolution to a society in terms of related medical, psychological and legal costs. If this is the case, than investment in prevention and promotion is a small investment for a longer term larger gain. Setting up a prevention program is not without cost and difficulty as will be discussed in the section, pragmatic issues. Furthermore, without enough data, potential negative effects of participation in a prevention program can not yet be discounted.

Though arguments for increasing preventive interventions are persuasive, without the potential positive and negative effects being well researched, one could question whether they are justified. There are a number of potential negative consequences that were considered in regard to the present study (for more detail, see Chapter 8). First of all, it is likely that a number of severely distressed couples may respond to prevention efforts, if not identifed, the intervention offered may be inadequate for their needs and they may end up more discouraged than when they initial saught out help. In contrast, it is nondistressed couples that will most likely be targeted for prevention efforts. The powerful impact of labeling processes on people is well established in the field of social psychology. Preventionists need to seriously consider the potential negative effect of screening and offering information to nondistressed couples. For a happy couple to be told that they are at high risk for divorce because of a number of risk indicators or factors could potentially bring instability or disatisfaction into their stable and happy relationship.

THE PLACE OF RELATIONSHIP HEALTH PROMOTION IN THE CURRENT HEALTH SYSTEM

Acceptance of funding of relationship health promotion and prevention programs

As already mentioned, more effort and finances are invested in treatment than in prevention of health problems. The current Western health care system is primarily characterized by a reactive approach to health: focusing on immediate problems of a critical nature. Prevention and promotion efforts make up a marginal part of the system and funds are scarce. Prevention requires an investment in reducing the future incidence of health related problems: A proactive approach. It is quite logical that treating existing problems is the most accepted method of intervention today. Intervening before severe problems arrive does not have the urgent nature of intervening at a moment of crisis. With the limited funds for mental health, prevention developments are likely to be the most vulnerable. For improved funding in support of prevention and promotion efforts for healthy relationships, it is thus crucial to have the backing of policy makers that are occupied with more long-term visions, rather than mental health workers and managers who face daily problems of a more urgent nature.

Currently, the WHO plays a central role in advocating that prevention is an important element of political and social planning for most countries. It is important for advocates of prevention and health promotion to understand the various reasons that prevention is more poorly funded than treatment. Needless to say, most political, social and mental health workers would agree of it's importance, yet few stand behind it in practice. Perhaps, the lack of support by government and medical institutions is a greater barrier to prevention than individual barriers. Though both are likely to influence each other. The difficulty in funding is not merely the amount of money needed for investment in prevention and promotion.

An additional barrier to the investment in prevention funds, is summed in the question: Why fix it, if it ain't broke? This question reflects the concern of investing in unnecessary efforts as well as interventions leading to unintended negative effects. According to Coie et al. (1993), if programs are known to have potential benefits and no adverse effects, they can be administered to unselected

populations. This may be still be too costly, however, and furthermore there is presently not enough data to rule out adverse effects. Targeting programs at individuals/couples at increased risk is likely to be a more justifiable and efficient approach (Bosma & Hosman, 1990; Nijmegen Prevention Research Group, 1993). In any case, large-scale or risk group focused interventions must be guided by research and high ethical standards. The effects of screening for risk indicators and factors also needs to be better researched. The issue at hand remains the need to supply persuasive arguments and research to convince policy makers and funding institutions that it is a worthwhile investment.

Several conditions need to be fulfilled to gain the backing of policy makers. First, persuasive empirical evidence must exist arguing that prevention or promotion in the area of relationship health is important for society. This means evidence of (a) the prevalence of relationship distress and dissolution, (b) a high cultural value attached to healthy relationships, (c) the health consequences of relationship distress and dissolution, (d) the large costs of relationship distress and dissolution in terms of burden on professional services and on social welfare, and (e) the short and long-term impact of relational discord and dissolution on children, adolescents and adult offspring. Second, empirical data is needed to clarify if and which programs and approaches in prevention are effective.

Promoting prevention within the current health system values: children, medical issues, psychopathology

The current health system is based on the medical and disease model, which appears to contradict preventive approaches to healthcare. Perhaps through more information and data guiding decisions about funding, a shift may occur in the current health paradigm away from the disease model. Though at this time it may make the most sense to discuss how prevention efforts can fit into the current disease paradigm. To fit in the current model, the negative effects of relationship distress need to be emphasized. That is, preventing relationship distress rather than promoting relationship health fits in the medical model of disease. Perhaps adapting prevention efforts to the system is more efficient than trying to change the system.

Another avenue to receiving attention from current policy makers is emphasizing benefits for children, as a primary concern of today's policy makers is the health of children. Given the documented serious consequences of marital

or relationship distress and divorce on children (Emery, 1982; 1988), as described in Chapter 1, the need for prevention work can be argued as especially important for the lives and development of today's children. Helping couples in order to help their children is a persuasive argument.

DEVELOPMENT AND IMPLEMENTATION OF PROGRAMS

Different strategies for promoting relationship health

Prevention and promotion efforts offer many possibilities for the level and intensity of intervening. One possibility for prevention and promotion efforts is mass education through media sources. Attitudes, expectations and beliefs about relationships are reflected in and shaped by the media, including through films, newspapers, magazines television and radio. The media, with the television industry, in particular, can be also be used to promote healthy and realistic beliefs about relationships as well as to model healthy ways to deal with relationship stressors. Although this strategy is used frequently in health education, in general, little research has been conducted on mass education on mental health and healthy relationships. Further, employers, physicians, teachers, church workers, lawyers and government workers including policy makers are all in positions to distribute information about healthy relationships. Promotion and prevention efforts are likely to be most successful when a variety of strategies are used instead of just one approach (Hosman & Bosma, 1992).

In contrast to the mass education approach, the approach that is the primary focus of this chapter and the present research, is the educational approach of directly teaching couples the skills associated with having a healthy relationship (see also Chapters 8 and 9). Much more research is available on this approach than the 'mass' approach. We start this section with a review of the literature of target groups of couples with whom to potentially intervene with.

Who to intervene with: Selecting target couples

Coie et al. (1993) argue for the identification of generic risk factors and the enhancement of protective factors of mental health versus a specific focus on a single disorder. In contrast, we argue for the approach taken in the present study of selecting high risk groups (Van Widenfelt, Schaap & Hosman, 1991; 1992). Cost-benefit analyses conclude that a prevention approach to high risk groups may be more efficient than universal approaches (Lorian, Price, & Eaton, 1989).

Epidemiological studies can serve as a basis for identifying couples at risk (e.g., Van Widenfelt et al., 1992). Information from clinical practice, such as taking note of what brings couples into therapy (i. e., not successfully dealing with the tasks of a new life phase) is another way to identify risk factors for relationship distress. Further, the literature on therapy and research provides some clues to the risk of individual psychopathology for relationship distress (i.e., having a depressed partner). Lastly, as Coie et al. (1993) state, the specific period in which the risk factor is predictive of dysfunction should also be considered when making decisions about implementing preventive interventions.

Risk indicators, risk factors and risk groups

A number of excellent literature reviews address a complex set of variables associated with relationship distress and dissolution among subgroups of the population (Kitson & Morgan, 1990; Price-Bonham & Balswick, 1980; White, 1990). In this section, we give a brief overview of some of the important indicators and factors associated with relationship distress and dissolution. These indicators and factors can be used to identify couples at risk and to direct interventions to groups at risk for relationship distress and dissolution. To start with, a preventive strategy based on a risk approach requires familiarity with several concepts: risk, risk indicators, risk groups and risk factors.

Risk refers to the statistical association between some experience, condition or behavior and the development of relationship distress and dissolution. Subgroups that are considered "at risk" have a higher prevalence of relationship distress or dissolution according to large epidemiological studies. Couples can be identified through *risk indicators*, such as marrying at a young age. Risk indicators are those variables related to relationship adjustment and stability that do not necessarily offer causal information, but rather they aid in identifying subgroups of the population at high risk. Indicators that help locate risk groups are especially useful for selection and recruitment purposes. *Risk groups* are those groups of persons or couples that run a greater chance of having relationship difficulties or experiencing break up than the general population. Since relationship distress and break up rates differ in various populations, it is important to identify risk groups for which interventions can be targeted at.

Risk factors refer to variables that have causal influence on relationship adjustment and stability. Risk factors are important for the selection of program

targets and for program development. Risk factors, like risk indicators, characterize subgroups that have a higher prevalence of relationship distress or dissolution. Single risk factors alone are not necessarily indicative that an individual or couple will develop relationship distress or break up, merely that they have a higher than average chance that they will, as many factors are involved. It is rare to find a one-to-one correspondence between a causal risk factor and a specific disorder, and in the case of relationship distress this is certainly true. It can be concluded from the current available knowledge base, that relationship distress and dissolution are related to a complex interaction of a number of factors. As a consequence, preventive efforts preferably need to be multi-factor oriented.

Risk indicators and risk groups

For the present study, we first reviewed the literature to identify risk indicators/groups for relationship distress/divorce. In this section, a series of risk indicators and groups for which interventions can be targeted at are outlined. Personal and familial history of divorce and relationship distress appears to be an important risk indicator of future relationship distress and divorce. Large demographic studies both in the United States and the Netherlands reflect higher rates of relationship distress and/or break up in adult offspring of divorced parents than of intact families (De Graaf, 1991; Glenn & Kramer, 1987; Kooy, 1984; Pope & Mueller, 1976). Not only is parental divorce a risk indicator, research also shows that a previous divorce of one's own could be considered a risk indicator. Approximately 80 percent of divorced persons remarry (Duberman, 1975) and those second marriages have a higher and earlier chance of ending in divorce than first marriages (Martin & Bumpass, 1989). Thus, persons with a history of divorce, run a higher risk of experiencing relationship distress and divorcing than persons who have never having experience their own or their parents divorce.

Another risk indicator for relationship distress and divorce is the presence of mental illness in one of the partners. Both in the United States and in the Netherlands, higher rates of divorce have been reported in mentally ill populations (Merikangas, 1984; NVAGG, 1988). A large number of studies over the last two decades have reported a relationship between depression and relationship distress and divorce (e.g., Barnett & Gotlib, 1988; Ruscher & Gotlib, 1988; Weissman & Paykel, 1974). Alcohol abuse has also been associated with

relationship distress (Jacob, Dunne, & Leonard, 1983; O' Farrell & Birchler, 1987; Schaap, Schellekens, & Schippers, 1991) as well as with divorce (Reich & Thompson, 1985). (See also section on psychological health in Chapter 1.)

In the Netherlands, census bureau data point to a demographic pattern of higher rates of divorce for persons marrying at a young age, being married between three and ten years, having a premarital pregnancy, and having few or no children (Kooy, 1984). These indicators of high risk are similarly reported in US data by Bumpass and Sweet (1972). In contrast to US data, in which Fergusson, Horwood, and Shannon (1984) report persons of lower SES to be at higher risk for divorce, Kooy (1984) reports white collar workers in urban settings in the Netherlands to be at higher risk than those persons working and living in rural environments. This finding reflects that there may be slight differences from one country to another as to which demographic factors are most indicative of risk and therefore each country needs to examine what their own demographic risk indicators are.

Another approach of identifying couples at risk is to target efforts at couples going through an important life event or transition. Numerous studies show that relationship satisfaction decreases when couples go through the transition to parenthood (Belsky, Lang, & Rovine, 1985; Cowan et al., 1985; Duncan & Markman, 1988). Other critical times related to increased relationship distress and dissolution include the departure of the last child from home or the occurrence of a major life event.

In sum, a sociodemographic picture emerges from the data highlighting specific subgroups in the population as at increased risk for relationship distress and divorce. Risk indicators can be used as a criteria to select target groups for prevention of relationship distress and divorce, as in the present study. From the many variables mentioned, for the present study we chose to focus on parental divorce as a risk indicator.

Further, we selected couples on the basis of degree of relationship distress as a criteria in the present study, in which severely distressed couples were excluded from the prevention trial. Primary prevention efforts are intended to target nondistressed couples usually aiming at preventing the development of relationship distress and/or dissolution. It can be argued that the experience of some distress could function as an important motivating factor for participation in a preventive program. However, once relationship distress has become very severe and stable, bringing about change is more difficult. Intervening before

couples are distressed falls under primary prevention, and intervening when couples are mildly distressed is referred to as secondary prevention. Couples with a high level of relationship distress can be referred to for couples therapy. For this determination, cut off scores for inclusion and exclusion can be used with relationship satisfaction questionnaires such as the Dyadic Adjustment Scale (DAS; Spanier, 1976), Locke Wallace (LW: Locke, 1959) or the Maudsley Marital Questionnaire (MMQ; Cobb, McDonald, Marks, & Stern, 1980), which was used in the present study. Once we chose a population to evaluate the preventive intervention with from the reviewed literature, the next step was to review the clinical and research literature for risk factors that could be translated into program targets as well as establishing a foundation for doing that.

Establishing a foundation for developing an intervention: Theory, clinical experience and the identification of risk factors

Across continents a series of studies evaluating the effectiveness of preventive interventions for relationship distress and dissolution are in progress (i.e., Burnett, Nordling, Brown, & Baucom, 1991; Hahlweg et al., 1992, Halford & Behrens, in press; Markman et al., 1986; Markman, Floyd, Stanley, & Storaasli, 1988; Markman, Renick, Floyd, Stanley, & Clements, 1993; Markman & Hahlweg, 1993; Van Widenfelt et al., 1991). The above cited studies are evaluations of short-term programs for relatively happy couples, teaching the basic skills associated with relationship happiness. As a matter of convenience, these programs are referred to as PREP and PREP variants based on Markman's original program: the Premarital Relationship Enhancement Program (PREP). At this point in time, short-term evaluations have been conducted revealing modest or mixed results, whereas longer term data is still in the process of being collected and/or analyzed (with the exception of Markman, who has published data through a six year follow-up evaluation). (These findings are discussed in Chapter 9). Below, the theoretical, clinical and research foundation of the above cited research programs evaluating various versions of PREP is reviewed, with the present study in mind. Efforts have been made to apply and adapt prior clinical and research experience to preventive interventions for nondistressed couples in a short-term training format.

PREP and PREP variants, such as the present study, are largely based on experience with cognitive behavioral couples therapy (see Baucom & Epstein, 1990; Gottman, Notarius, Gonso, & Markman, 1976; Olson, 1976; Stuart, 1980).

The cognitive behavioral approach to working with couples finds it's roots in basic social learning theory (Bandura, 1977) and social exchange theory (Thibaut & Kelley, 1959) principles, advocating the notion that couples will experience relationship happiness or distress in direct proportion to the rates of positive and negative interactions in their relationship. The approach has further been supported by research findings as described in this section that happy couples report higher rates of positive exchanges and lower rates of negative exchanges than unhappy couples (Schaap, 1984). An important element in decreasing negative exchanges is helping couples decrease their reactivity during negative exchanges through using communication skills such as emphasizing separate speaker and listener roles or helping persons reformulate negative attributions. Further in couples therapy, the goals usually include to: increase positive interactions, effectively communicate about problems, manage and reduce conflict, have more realistic relationship expectations/beliefs, enhance sexual/sensual intimacy, discuss and clarify roles, take more individual responsibility for change, and increase awareness about and discuss underlying issues from the individual partner's past or family of origin that contribute to current relationship dynamics.

PREP and PREP variants are further based on the assumption that couples desire and are committed to positive maintenance and change but may lack the skills to do so. It is believed that couples can learn the necessary skills by participating in an intervention, though the approach relies heavily on practicing skills outside of a structured session in their own natural setting (Notarius & Markman, 1993). The described goals and assumptions are easily translated into goals and assumptions for prevention and promotion programs (e.g., Behrens, Halford & Sanders, 1992; Markman, Blumberg, & Stanley, 1991; Schaap & Van Widenfelt, 1990).

Several psychological and interactional variables that distinguish distressed and nondistressed relationships that have influenced the development of the various PREP interventions, including the present study. This line of research on risk factors related to relationship distress is reviewed in the following.

Communication variables have across observational studies consistently discriminated maritally distressed and nondistressed samples in several countries, including the Netherlands (e.g., Schaap, 1982), Germany (e.g., Hahlweg, Helmes, Steffen, Schindler, Revenstorf, & Kunert, 1979) and the

United States (e.g., Margolin & Wampold, 1981). Distressed couples are described as more negative, demonstrating poorer problem solving behavior, more coercive behavior, more defensive behavior, more criticism, sarcasm, and complaining (Birchler, Weiss, & Vincent, 1975; Gottman, Markman, & Notarius, 1977; Halford, Hahlweg & Dunne, 1990; Schaap, Buunk & Kerkstra, 1988; Vincent, 1972; Vincent, Weiss, & Birchler, 1975). Longitudinal studies have shown that premarital couples who show these patterns are at higher risk of break up and distress (Markman & Hahlweg, 1993). In contrast, nondistressed couples are described as displaying more positive behavior, higher rates of problem solving, more positive affect such as smiling, attentiveness, and having a positive voice tone, higher rates of agreements and validation (Gottman, 1979; Hahlweg, Kraemer, Schindler, & Revenstorf, 1980; Revenstorf, Vogel, Wegener, Hahlweg & Schindler, 1980).

Cognitive factors have also been reported to discriminate distressed and nondistressed couples. Distressed couples are more likely to have negative expectations for their relationship, view their partners as responsible for relationship problems as well as make more global untangible attributions about their problems (Fincham, Bradbury, & Scott, 1990). Nondistressed couples are reported to have more realistic beliefs about their relationship, stronger beliefs that they can work through their problems and partners are more likely to accept responsibility for relationship issues (Fincham, Bradbury, & Scott, 1989; Meeks, Arnkoff, Glass, & Notarius, 1986; Notarius & Vanzetti, 1983; Vanzetti , Notarius, & NeeSmith, 1992).

Finally, several studies report an association between relationship satisfaction and the quality of the sexual relationship. Distressed couples are more likely to experience a lack of intimacy, low sexual satisfaction, and a higher incidence of sexual dysfunction (Appelt, 1984; Rosenzweig & Dailey, 1989).

By identifying the factors associated with relationship quality and stability in the research literature, a foundation for developing effective prevention and promotion programs can be formed. In sum, a number of important psychological and interactional factors are found to be related to relationship dissatisfaction: poor communication skills, deficits in conflict management and problem solving, unrealistic relationship beliefs, low sexual satisfaction, lack of intimacy and low relational efficacy. These factors have a direct impact on relationship quality and thus provide a good foundation for developing program targets. The advantage of focusing on behavioral skills and thinking patterns is

that they are factors which are easier to change than other important influences such as cultural norms or family background. (Though bringing change about on the individual or couple level may, however, challenge the influence of cultural and familial background.) Obviously, other variables related to relationship quality are also important that are not discussed in this section nor are focused on in the present study, such as alcohol and drug abuse, infidelity, incompatibility, physical and sexual abuse, and disagreements about gender roles (White, 1990). These diversity in risk factors offer a variety of possibilities for preventive efforts. It is likely that no single factor is primarily linked to relationship quality and stability. Given the array of variables to choose from in the program development phase, researchers and clinicians are faced with difficult decisions. Often their choices are founded in their own history of conducting research and clinical work, as in the present study. The development of the PREP (Markman et al., 1991) and PREP variants nicely exemplifies how clinical experience as well as research on the factors that distinguish distressed from nondistressed couples can be used as a basis for selecting skills and program goals (Burnett et al., 1991; Hahlweg, Thurair, Eckert, Engel & Markman, 1992; Halford & Behrens, in press; Markman et al., 1986; Van Widenfelt et al., 1991). Once a researcher or clinician has chosen a population to intervene preventively with, reviewed the clinical and research literature on risk factors related to the outcome that they want to prevent (relationship distress/divorce), the next step is translate this literature into elements the intervention should contain (with consideration given to the target population.) Chapter 8 gives a detailed overview of the program elements of the preventive intervention of the present study. In the following section is an important consideration for choosing and implementing program elements. Other considerations are also discussed in Chapter 8.

Core and adaptable features

When deciding on program elements, it is important to distinguish between core program features and adaptable program features (Price et al., 1989). Core features are those key elements of a program that should *not* be adapted or changed. In the case of PREP, a core feature would be listening skills, among others. An adaptable feature, is something that can be modified to suit local and target group needs. We would go as far to say that adaptable features are necessary. Adapting a program is crucial for the reception of the program by the

potential target group. For example, in the present study we had to carefully work with language and presentation of material to fit into the Dutch culture. This also meant following the daily rituals of the Dutch culture during the time the program was offered (serving coffee, tea and cookies around eight o'clock in the evening.) In sum, when deciding what elements to include in a prevention or promotion program, researchers should be guided by theoretical principles and prior research, and be able to in advance identify and explain the factors that are expected to influence the identified risk and protective processes (see Coie et al., 1993, pg. 7.)

PRAGMATIC ISSUES IN PROGRAM DEVELOPMENT AND IMPLEMENTATION

Costs and funding

Costs of preventive interventions vary and depend on a number of factors, such as the length of the program, the ratio of paraprofessionals or trainers to the number of couples and the necessary education and training level of the trainers. Recruitment and advertising costs range from putting together a few inexpensive news ads and distributing some pamphlets to putting in more effort to engage important community members and media persons. Costs related to supplies (questionnaires, handouts and training manuals) are limited and space to offer training programs is usually to be found in existing institutions where other forms of treatment or courses are given such as at university classrooms or clinics, hospitals or private practices.

The development of effective prevention programs is a very time-consuming and expensive enterprise. However, once effective programs are available, a cost-effective implementation can be expected. Preventive interventions can be supported by and given at universities, private practices, and community mental health settings. Further support can be sought by government assistance, insurance companies, churches and couples themselves. For an estimate of the cost of the delivery of the preventive intervention evaluated in the present study, see Chapter 8.

Barriers for couples to participate in prevention research and programs

Taboos on sharing one's intimate relationship with others can serve as a barrier to participation in prevention or promotion efforts (Mace, 1987 cited in

Bradbury & Fincham, 1990). Marriage and marriage-like relationship in Western culture are still viewed as a private matter. This taboo prevents couples from seeking help in which they are requested to share the private matter of their intimate relation. Bradbury and Fincham (1990) further cite Vincent (1973) in stating that through the taboo, the assertion that a successful marriage should come naturally to the partners, without effort or help from others is supported. Seeking help is thus admitting one has failed in what is culturally viewed as a natural and thus simple task in life. Further, in the popular media (i.e., films), a picture of marriage as a romance is an additional barrier to the message of therapy or prevention, that marriage takes work. For many couples, romance equals something that comes naturally; spontaneously, without work. The idea that one's relationship may be happier and more romantic by working on it is for many counterintuitive. Lastly, Bradbury and Fincham (1990) raise the issue that perhaps current pessimism about the institution of marriage plays a role in persons or couples resisting prevention efforts.

Bridging barriers: Motivating couples

If couples are distressed, they are much more motivated than couples who are not distressed to take part in an intervention, which presents a special problem for prevention trials. Therefore for primary prevention, it is important to consider what motivates nondistressed couples to care about preventing negative outcome in the future. One motivating factor, stimulated by the media or personal experience, is the increased awareness of high divorce rates. The current awareness of divorce rates, competes with current ideas of marriage as a romance, perhaps motivating couples to address this gap. Further, if the long-term data from current evaluation studies reveal that individuals/couples can make a difference in their chance of working out relationship problems and this is published in more popular magazines or TV programs, couples may be motivated to work on their relationship. Lastly, as couples are aware of programs being available in the institutions that they come into contact with (i.e., schools, day care centers, hospitals), they may become interested in participation.

Recruitment issues: Engaging couples in programs

In several of the programs mentioned (Halford & Behrens, in press, Markman et al., 1986, Van Widenfelt, et al., 1991), couples were recruited

through the local media, including newspaper ads, interviews in major and local papers and magazines, and radio advertisements. Further the distribution of posters and pamphlets have been used to supplement efforts. In the present study, it was found useful to use several of these channels to reach couples as many couples commented that they had seen the advertisement for the study prior to the advertisement that they ended up responding to. Responses ranges from no response to up to 40 responses from one advertisement. In Australia, and in the US, programs have also being popularized through current affair programs, talk shows and news pieces. In Germany, given the importance of the setting (the church), the program of Hahlweg et al. (1992) was listed as part of a course program available to all church members, though for research purposes this complicated possibilities for randomization. The success of a recruitment strategy is also determined by the degree that use of advanced social marketing techniques are used. Further, in the case of research studies on prevention, participants can be motivated by being offered special rewards. In Denver, Markman offered couples $25.00 for their participation. In the present study, couples were given a popular book written by members of the psychology faculty on relationships.

Rates of acceptance to participate for volunteer couples who were randomly offered a prevention training, tended to be around 39% in the US (Markman et al., 1986), 60% in the present study (see Chapter 9), and in Australia when the choice was given to participate in a high intensity version of PREP vs. a low intensity home version of PREP, acceptance rates were about 70% (though 20-25% of those did not complete the program) (Halford & Behrens, in press). These percentages indicate that it is important to learn more about the barriers to participation. It is difficult to speculate on why some couples agree to participate and others refuse. The reasons given for refusal to participation in the Netherlands were usually one of three: "too busy", "we don't need a training", or "too scary". Sometimes taking the opportunity to explain to an unsure couple what specifically the program entails and the researchers motivation for the program, relieves a couple of their doubts. For example, to explain that the program is not therapy, that it is very practical, that they may stop at any time were helpful in reducing fears. Other couples researchers in Maryland and North Carolina have researched offering a variant of PREP in a weekend format for busy couples, thus accommodating to dual income couples tight schedules during the week (Burnett, 1993; Burnett et al., 1991).

Intervention locations

The setting for interventions is also of importance, especially in relation to accessing couples. It is important to consider where one can access couples and secondly in what setting couples would feel comfortable participating. In Germany, Hahlweg and colleagues (1992) are evaluating a program in a church setting. As already mentioned, in the Netherlands, a large proportion of couples do not attend church, thus church settings were excluded. Instead in the present study as in Markman's program in Denver, Colorado, evaluation took place in a university setting (Markman et al., 1986; Van Widenfelt, et al., 1991). The university may for some couples to whom it is unfamiliar serve as a barrier, whereas for many others it carries the esteem that may give couples a sense of trust in the program. Other options are school settings, community centers, daycare centers and hospitals.

In addition to being sensitive to the setting in which couples feel comfortable, interventions are likely to be more effective if they are successful at taking into consideration the cultural context, the personal history and life stage of the participants (Coie et al., 1993; Hosman, & Bosma, 1992; Van Widenfelt et al., 1991). This 'fit' between the person, environment and intervention is critical. What may be an effective approach in one culture or subculture may not be effective in another (Van Widenfelt et al., 1991). With the present study taking place in Holland, yet being primarily based on materials from the USA, this meant, in particular taking care in translating the material from English to Dutch. This point is crucial in effectively intervening with couples. The bottom line here is: do not to create barriers between the program delivery persons and the participants. This statement is in line with what was referred to as an 'adaptable' program feature in an earlier section.

Program implementation

The use of advance degree psychotherapists is not necessary for prevention program delivery if participants are properly screened for relationship distress, leaving a variety of possibilities for who can be used to deliver programs. Mental health professionals or students ranging from nurses to social workers as well as other persons in the community, such as teachers or religious figures could be trained for program delivery. For example, in the present study, upper level Clinical Psychology students were used as trainers. (See also Chapter 8.)

It is essential to build in measures of quality control, starting with a solid training and a detailed manual of the protocol. Once that is established, there are several other ways quality can be controlled. It is important that trainers receive continued supervision throughout program delivery, which could be enhanced with the use of audio- or videotapes or 'live' supervision. For example in the present study, quality was controlled by close supervision of each session as well as separate weekly supervision sessions. Further evaluations by both couples and trainers were conducted directly after each session thereby providing continuous feedback. If sessions are recorded or observed, they can be rated on a set of criteria to check for adherence to the protocol. This is a common method used in therapy research that would improve prevention trials as well. Ideally, program delivery in the community should be a collaborative venture with experienced researchers/clinicians to ensure adherence to the protocol and to uphold ethical standards.

Once trainers are trained, quality control procedures are put in place and couples are recruited, the program can be delivered. PREP and PREP variants have usually been conducted in five to six sessions ranging on average about 2 to 2 1/2 hours per session. Sometimes a 'break' is given during the middle of the training, as in the program of the current study, extending the program length to seven weeks in duration. Researchers in Maryland and North Carolina (Burnett et al., 1991) have managed to condense it down to a weekend and still manage positive results. In Australia, a high intensity version of PREP was delivered across a six week period with two 2 1/2 hour sessions per week as well as a low intensity version involving two sessions in the six week period.

The general structure of PREP sessions is to initially meet with a group of couples (ideally 4-5), where couples are provided information on the focus of the session (e.g., presentation of communication model). After a brief lecture, couples are given an exercise to practice the newly taught skills with a personal trainer (separately from the other couples). The group meets together at the end of the session to discuss the session and receive a homework assignment. Homework exercises commonly consist of having a low intensity problem discussion applying the new skills and/or a 'caring days' exercise. The following session usually begins with discussion of homework. (See Chapter 8 for an example.)

Program evaluation and research

Thus far, evaluations of prevention/promotion programs for couples show only moderate success, though most studies lack essential long-term data. Success of prevention and promotion programs for couples and families, where inclusion criteria was of a low standard, evaluated in a meta-analysis by Giblin, Sprenkle, and Sheehan, (1985), of 85 studies, showed an average effect size of .44. This is somewhat lower than that of C-BCT studies. In couples therapy studies (C-BCT), treated individuals did better than 83 percent of controls (Hahlweg & Markman, 1988), whereas according to Giblin's meta-analysis, persons participating in prevention and enrichment programs targeting at improving relationship quality, improved more than 67 percent of controls (see Bradbury & Fincham, 1990 for a discussion of these findings).

Hahlweg and Markman (1988) calculated the average effect size for a smaller more selective group of prevention studies (7) and found an average effect size of .79, indicating that the average person improved 79% more than controls. In their summary of effect sizes, Bradbury and Fincham emphasize that there is quite a range of effects of different programs that requires more analysis. For example, they point out the large difference in program effects depend on the measures used. Greater effects were found with behavioral measures than with self report measures (.76 and .35 average effect sizes respectively.)

The following are some guiding criteria for future research. A task force of the American Psychological Association, led by Richard Price, developed a set of criteria for their search for effective prevention programs. These criteria are similar to those described by Bosma and Hosman (1990) and Hosman and Bosma (1992). They are as follows: a) a clear description of the group at risk and the emotional or behavioral condition to be prevented; b) a statement of a rationale for the intervention including its timing, duration, and sequencing; c) a description of the actual intervention; d) a description of the skills necessary to conduct the intervention; e) a specification of the program steps taken to recruit intervention participants; f) a specification of observable and measurable program objectives; g) a description of the program evaluation, monitoring, and follow-up data; h) a description of how the program relates to community groups, organizations, and agencies; i) consideration of ethical issues; j) the transferability of the intervention to other settings; and k) roles of professional and nonprofessional caregiver resources (Price et al., 1989, pg. 50). Price and his

colleagues report that one of the hallmarks of effective programs is that rigorous data has been collected to document the success of the program.

Further, more studies are needed on high risk groups and future research designs could benefit from the inclusion of normal and/or low risk controls (e.g., Halford & Behrens, in press; Van Widenfelt, et al., 1991). Designs using comparative interventions (e.g., Halford & Behrens, in press) or attention-only controls are also needed to conclude any specific effects of the intervention (vs. a general benefit of participation in an intervention). Randomization procedures are recommended and have been used in the studies of Markman et al. (1986) and the present study as well as by Halford and Behrens (in press).

Markman (1992) and Coie et al. (1993) argue that the long-term follow ups of couples who have participated in programs is critical. To determine whether prevention programs prevent relationship distress and dissolution, couples need to be followed for a rather long period of time. Markman's study is the only known prevention of relationship distress and divorce study that has data on couples over a long period of time (reports published through six year follow-up). Given the difficulty of collecting longitudinal data, we can not afford to wait 10 years for the outcome of the couples that are now participating in programs. It is thus important to look at some of the short-term markers of program effects. For example, Markman reports that immediately after implementation of PREP, couples did not report changes in satisfaction but did show improvements in their ability to communicate effectively. However, at the 18 and 36 month follow up, differences between groups in satisfaction were evidenced with the control group showing a decline in relationship quality that was not evidenced in the intervention group. This finding indicates, that perhaps satisfaction is not the only valid rating of program effects and that obtaining and measuring the goals of the program (in this case improving communication) are also of importance. Nonetheless, short-term evaluation of benefits are likely to appear small or even nonexistent, where it is highly likely that benefits from preventive interventions increase over time (Price et al., 1989).

Lastly, the quality of measures used is of utmost importance for evaluating programs and being able to compare evaluations with existing data. It is appreciated when researchers use similar measures to facilitate the comparison of findings. The following are several commonly used instruments to measure different aspects of couple functioning: (1) the Dyadic Adjustment Scale (DAS; Spanier, 1976) to measure relationship satisfaction, (2) the Marital Agendas

Protocol (MAP; Notarius & Vanzetti, 1983) for assessing relational efficacy as well as getting an inventory of problem intensity; and (3) the Conflict Tactics Scale (CTS; Straus, 1979) for assessing verbal and physical aggression. Researchers are advised to also find out what measures are validated in their own country, and try to make use of those measures. In the present study, a combination of Dutch and American measures were used.

CONCLUSION

In this chapter, we have supplied arguments for prevention and promotion efforts in the area of relationship health. A rationale for evaluating a preventive intervention with couples in the Netherlands is provided. Current risk indicators were reviewed and parental divorce was selected for further investigation in the present study. Factors for relationship distress and divorce were reviewed that are relevant to the intervention evaluated in the present study. A brief description of program elements was given as well as a series of practical experiences related to program implementation were shared. Lastly, guidelines for future research were discussed. Through this presentation, the issues that were struggled with and the steps taken for the setting up of the present study are revealed. Further description and discussion of the intervention can be found in Chapter 8. Details on outcome of the program evaluation and follow-ups can be found in Chapter 9. Chapter 7 also describes the risk group of couples with parental divorce (compared with couples from intact families).

Though the setting up of an evaluation of a prevention program is costly, time consuming and labor intensive, we expect that if successful that the costs are minor in comparison to the costs related to relationship problems and dissolution, including the effects on children (costs of delinquency), effects on partners (costs of mental health care and legal costs) and the financial expenses for families. Further, costs extend beyond the immediate family: for employers, productivity loss is likely, for schools, academic problems for offspring are likely, for insurance companies, an increase in health costs is likely, for taxpayers costs related to increased crime and social problems are likely.

Chapter 3

Research questions and hypotheses

In this chapter, the two lines of research of this dissertation are outlined and the research objectives are described.

INTRODUCTION

The present manuscript describes two empirical studies in which a number of research questions are addressed. For the first study, self-report and observational data were collected to investigate the association between gender, conflict, communication, relational efficacy and relationship satisfaction (Part II). Chapters 5 and 6 report the results of this study.

The second study is on risk for and prevention of relationship distress and divorce (Part III). The study was conducted on a subset of the larger sample, excluding those couples already experiencing severe relationship distress. Adult children of divorce, identified in the literature as at increased risk for relationship distress and divorce were studied. Results of analyses conducted to describe these "at risk" couples on both self-report and observational measures of relationship functioning are found in Chapter 7. Next, a preventive intervention for relationship distress was evaluated. First couples who completed the intervention were compared with control couples at a nine month and two year follow-up. Next, subjects of parental divorce and their partners were compared with couples from intact families to examine differences on a number of self-report measures to investigate whether the preventive intervention has preventive value for couples at risk. The results of this evaluation are reported in Chapter 9. The following is an overview of the research questions and hypotheses of the two studies.

Gender, communication and relationship distress

Previous studies report males and females to communicate differently, especially studies using self-report measures. Numerous observational studies have also found distressed and nondistressed couples to communicate differently. One prominent gender-linked communication pattern described in the literature is the demand-withdrawal pattern: husbands are described as withdrawn, wives are described as trying to engage their husbands, resulting in husbands withdrawing more and wives trying to engage the husbands with greater negativity, and husbands distancing themselves even more, and so on. (Note, pattern can also begin with wive's behavior.) Despite provocative reports and descriptions in the literature, the relations among relationship distress, gender and communication behavior have not been well analyzed. Many

studies on gender differences in communication have failed to look at relationship satisfaction as a related variable. Therefore, it is unclear if observed differences in communication are reflective of gender-linked communication behavior or are related to relationship distress. In the current study, the relations among relationship distress, gender and communication behavior are studied using videotaped problem-solving discussions with a reliable and validated method of quantifying the observational data.

(1) *Research question:* Are gender differences in frequency of different types of communication behavior observed, as described in the popular and self-report literature, when behavior is directly measured?
(H1) In a problem-solving discussion, female partners will be more expressive than male partners.
(P1) Compared to male partners, communication behaviors of female partners will be characterized by more self-disclosure, emotional validation and emotional invalidation.
(P2) Compared to female partners, the communication behavior of male partners will be characterized by more problem-solving facilitating and problem-solving inhibiting statements.
(2) *Research question:* Are gender differences in communication behavior found when sequences of communication behaviors are observed?
(H2)The behavior of male partners and female partners is interdependent in a problem-solving discussion.
(P3) A cyclical pattern will be evident in problem-solving discussions of distressed couples wherein male partners' withdrawal and conflict-avoidant behavior will be followed by female partners' conflict-engaging behavior and emotional expressive behavior and vice versa.
(3) *Research question*: Are interactions of distressed couples more gender stereotypic than nondistressed couples?
(H3) Marital distress is associated with interactional differences between male and female partners.
(P4) Lower marital adjustment will be related to more pronounced gender-linked communication behavior.

Cross cultural reliability and validity of a measure of relational efficacy: The MAP

Most of the measures used in the present studies have been researched in the Netherlands. One exception is the Marital Agendas Protocol (MAP), a key measure in the studies. Therefore it's reliability and validity was examined. The MAP measures relational efficacy, which is defined as an individual partner's generalized expectancy regarding their capacity as a couple to successfully resolve relationship issues. The MAP has proved to be a reliable, valid and also useful instrument for use with couples in the United States. No cross-cultural data has yet been published on the MAP, however. The present study uses the MAP in a Dutch population, providing a cross cultural data set on the instrument. The psychometric properties of two subscales of the MAP, problem intensity and relational efficacy are examined. Descriptive statistics on the individual items of the MAP are conducted. Further, problem areas in terms of intensity, relational efficacy are examined according to gender differences and level of relationship distress.

Parental divorce and relationship functioning in adult offspring and their partners

It is suggested in the literature that adult offspring of divorced parents run a higher risk of relationship distress and divorce as well as a vast array of other problems. The nature of studies on the intergenerational transmission of divorce are primarily large national survey studies, uncontrolled clinical reports or small self-report studies on college students. What is lacking in the literature is a more in-depth controlled study of the intimate relationships of persons with divorced parents. In the present study, the relationships of couples in which one partner has divorced parents are described using both self-report and observational measures of relationship functioning. Couples in which one partner has experienced parental divorce (PD) are compared with couples in which both partners come from intact families (IF).

(1) *Research question*: What is the association between parental divorce and current relationship functioning?

(H1) Couples in which one partner has divorced parents (PD), will demonstrate poorer relationship adjustment than couples who have an intact family of origin (IF).
(P1) Compared to IF, PD will demonstrate lower commitment, more destructive communication, poorer problem solving ability, higher rates of verbal and physical aggression, less intimacy, greater avoidance of relationship issues, lower relational efficacy, and lower relationship and sexual satisfaction.
(P2) Compared to IF couples, during a problem solving discussion communication behaviors of PD couples will be characterized by more problem-solving inhibiting statements and emotional invalidation and less problem-solving facilitating, and emotional validation.

Evaluation of the preventive intervention

Given the high rates of relationship distress and divorce and the severe consequences on partners and children, there is a need to investigate the effectiveness of preventive interventions aimed at decreasing the risk for relationship distress and dissolution. To date, the number of methodologically sound evaluations of prevention programs for couples in the Netherlands are limited. For the present study, a preventive intervention for relationship distress and divorce was developed based on a strong body of research and clinical experience. The study is a controlled evaluation of the effect of a preventive intervention designed to lower the risk for eventual relationship distress and divorce for couples who are not yet experiencing serious relationship difficulties but might be at risk for such according to the literature.

(1) *Research Question:* Can couples likelihood for relationship distress and dysfunction be reduced with a six session preventive intervention?
(H1) Control couples will show a greater decline in relationship satisfaction, lower relational efficacy, poorer conflict management skills and have higher rates of break up at follow-up than couples who participate in the intervention.
(H2) These rates of decline and break up will be strongest for couples in which one partner is identified as having a high risk family of origin (divorced parents) and who do not participate in the intervention.

Chapter 4

Method

The method used is outlined in this chapter, including a description of the subjects, the procedure, design and measures used.

Subjects

Eighty nine couples participated in the Partner Relationship Project conducted at the University of Nijmegen, Department of Psychology. At Time 1, of the 89 couples, 51% were married, 33% were cohabiting and 17% lived apart. The mean number of years together was 8 (SD = 8, range = 1-30). Forty-two percent of the couples had children. Mean age for males was 38 (SD = 10, range 20-63); mean age for females was 34 (SD = 9, range = 19-53). Forty nine percent of the males and 53% of the females reported a religious affiliation. A university degree was obtained by 26% of the males and 19% of the females (in the Netherlands a university degree is the equivalent of a Master's degree). Eighty percent of male subjects were employed outside the home in a variety of occupations. Of the 20% not employed, most were students, leaving 4% unemployed (n = 4). For females, 74% were employed, also in a variety of occupations. Twenty-six percent were not employed and took care of the household or were students leaving only 2% unemployed. See Table 4.1 for an overview of demographic data. The demographic data is comparable to the data of the Central Bureau of Statistics (1994) in the Netherlands, with the exception of education, with a much higher percentage of the present sample having obtained a university degree.

Table 4.1
Demographic characteristics of the total sample

	total sample (N= 89)	
children (n, %)	37 (42%)	
marital status (%)		
married	51	
cohabiting	33	
LAT	17	
nr of yrs together ($\bar{x}$, sd)	8.0 (8.0)	
	males	females
age (years) ($\bar{x}$, sd)	37.0(10.0)	34.0(9.0)
religion (%)		
Catholic	39	42
Protestant	6	5
other	4	7
none	51	47
education (%)		
elem school	2	81
high school	72	19
university	26	
occupation(%)		
employed	80	74
student	13	16
household	1	8
unemployed	4	2
pensioned	1	0

Relationship satisfaction

Based on the Dutch version of the Maudsley Marital Questionnaire (MMQ; Arrindell, Boelens & Lambert, 1983) relationship satisfaction subscale, couples were classified in three categories, (1) nondistressed: couple sum score 0-40, (2) mildly distressed: couple sum score of 41-70 , and (3) severely distressed: couple sum score above 70. Couples were also classified as severely distressed if they had a score difference greater than 15 and/or requested an intervention. Fifty-three percent were nondistressed (n=47), 23% mildly distressed (n=20) and 25% severely distressed (n=22). For a description of the MMQ see Measures section of this chapter.

For the analyses in Chapters 5 and 6, mildly and severely distressed couples were combined, resulting in two groups, nondistressed and distressed couples. For the risk and prevention study (Chapters 7-9), non- and mildly distressed couples were included and severely distressed couples were excluded.

There were no significant differences between distressed and nondistressed couples in marital status, education, religion, age, nor number of years married. Significantly more distressed couples had children (55%) than nondistressed couples (30%) χ^2 (1) = 5.70; p = .017. (See Table 5.1 in Chapter 5).

Recruitment strategy and selection criteria

Couples were recruited over a two year period primarily by popular media, including newspaper articles, advertisements and radio interviews, as well as distribution of posters and pamphlets. In an effort to control for selection bias, couples were recruited not knowing that an intervention would possibly be offered, instead couples responded to advertisements soliciting couples for a research study on relationship development and communication. The text of the advertisements were generally targeted at young happy couples. In all texts, it was stated that a book on relationships would be given for participation. The criteria for participation was a committed relationship of at least one year with plans for a future together.

Procedure

Informed consent

The first assessment began with the partners completing an informed consent form at which time the interviewer explained the procedure of the study and the possible risks involved as well as answered any questions the couples had at that time. Couple were also told about the longitudinal plans of the study and were promised a popular Dutch book on relationships for their participation, reports on the findings in a later stage of the study, and were told that they would be asked at a later time what they would like done with their videotape (have it destroyed or returned to them.) They were also told they could stop participation at any time.

The interviewer was instructed to try to help the couple feel as comfortable as possible by for example offering them coffee or tea, checking half-way during the procedure if they needed a break, and assuring confidentiality. The interviewer presented three rules to participants: (a) no discussing responses to questions between partners during the session, (b) if they had any questions they were to ask the interviewer who was always present for assistance, and lastly, (c) not to leave anything blank. General guidelines for responses of the interviewers when subjects asked for assistance were as follows: "there are no right or wrong answers", "do your best", "do not spend too much time on any one question".

Assessment

Partners separately completed a set of questionnaires, including questions pertaining to relationship and sexual satisfaction, commitment, communication, primary areas of conflict in the relationship and expectancies in regard to the outcome of these problem areas. (See Measures section). Following the completion of the first set of questionnaires, couples were offered a short break and then asked to have a videotaped discussion for approximately ten minutes on how they first met. This topic was chosen as it was considered a low-conflict task and was intended to help acclimate the couple to the videotaping situation. The interviewer was not present during the discussion and returned after ten minutes. The couple was then asked to discuss their top problem area for an additional twenty minutes, this was intended to be a high-conflict task.

The problem area was chosen by the interviewer from a problem inventory. Partner scores on question 1a of the *Marital Agendas Protocol* (MAP; Notarius & Vanzetti, 1983) were summed and the highest scored problem area was selected by the interviewer and presented to the couple. If couples expressed extreme discomfort about discussing the problem presented to them or if they expressed the feeling that they had nothing to say on that subject, they were offered the possibility to discuss their second highest rated problem. Couples were instructed to discuss the problem and try to come to a solution. Before beginning the problem discussion, couples were asked to separately rate on a 0-100 scale how close they expected to come to reaching a solution in the discussion they were about to have (scale developed by Cliff Notarius based on the MAP). The interviewer left the room and returned after 20 minutes asking the couple to end the discussion. Couples were then asked to immediately fill in a questionnaire pertaining to the discussion they just had "while it was still fresh", called the *Conflict Interaction Record* (CIR-lab; Schaap, 1990). See Measures section for description of instrument.

Lastly, couples were asked to complete the remaining questionnaires. The questionnaires that were not completed during the session, subjects were allowed to complete at home (e.g., lengthy questionnaires about family of origin and the biographical questionnaire) with the strict instructions just as during the session to complete separately, to not discuss the items and to return separately in a postage free envelope within a few days. In addition, couples were asked to separately keep a two week diary of all of their conflicts in that period using the *Conflict Interaction Record* (CIR-home; Schaap, 1990).

Intervention

Intervention, control and decline group

After the Time 1 assessment, of the 89 couples, 67 met the criteria for non to mildly distressed and were randomly offered the preventive intervention. Twenty-two couples were excluded based on MMQ scores of "severely distressed" or because they asked for an intervention. See Figure 4.1 for designation of couples to cells.

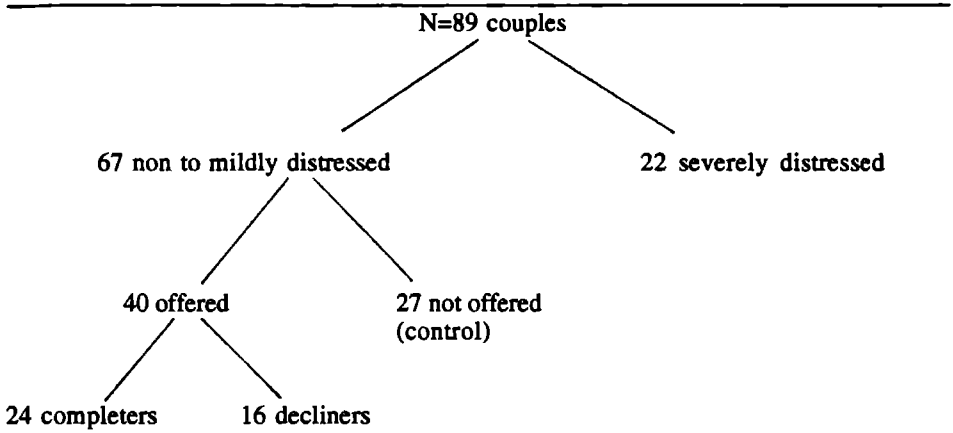

Figure 4.1: Designation of couples to cells

With the aim that the control and intervention group would be roughly the same size, more than half of the 67 couples (60%; n =40) were randomly offered the intervention, with the expectation of a decline group. Of the 40 couples that were offered the preventive intervention, 60% of the couples completed the intervention (n=24), 35% declined participation in the intervention (n=14) and 5% dropped out of the intervention by session 2 (n=2). This rate of participation is similar to, yet a little higher than, that of Markman, Floyd, Stanley, & Storaasli (1988), who used a similar recruitment strategy for which 40 percent of couples originally offered the intervention, completed the intervention.

On demographic variables at Time 1 for both males and females, intervention, control and decline couples did not differ significantly on age of males and females, nor in marital status (married, living together or living apart), or number of children. Non- and mildly distressed couples were evenly distributed across the three groups. Number of years together, however, was significantly different between groups at Time 1 [$F(2,66) = 9.06$, $p < 001$]. Mean number of years together for intervention, control and decline couples was 9.1, 6.3, and 3.9, respectively. See Table 4.2.

Table 4.2
Demographic characteristics of intervention, control and decline couples at Time 1 (N = 67)

	All (N=67)		Intervention (n=24)		Control (n=27)		Decliners (n=16)	
Children (n, %)	23 (34%)		9 (38%)		12 (44%)		2 (13%)	
Marital status (%)								
married	43		29		63		31	
cohabiting	37		42		30		50	
LAT	19		29		7		19	
nr. years together								
($\bar{x}$, sd)	6.3 (6)		6.3 (5)		9.1 (8)		4 (3)	
range	1-29		1-18		1-29		1-8	
	males	females	males	females	males	females	males	females
age (years) $\bar{x}$ (sd)	36 (10)	33 (8)	35 (10)	33 (7)	40 (10)	35 (9)	30 (7)	28 (5)
range	20-63	19-53	20-59	20-49	21-63	19-53	21-48	19-39
religion(%)								
Catholic	39	43	25	42	37	48	56	31
Protestant	9	6	8	0	11	15	6	0
other	3	3	4	4	4	0	6	13
none	49	48	63	54	48	37	31	56
education (%)								
elementary	5	2	0	0	0	0	2	0
high school and higher educ	67	77	58	79	78	85	72	81
university	28	21	42	21	22	15	26	19
Parental divorce (%,n)	19%(13) 21%(14) couple 40%(27)		17%(4) 25%(6) couple 42%(10)		15%(4) 22%(6) couple 37%(10)		31%(5) 13%(2) couples 44%(7)	

The preventive intervention program

The couples who agreed to participate in the intervention attended six two and half hour sessions, with the following foci: (1) speaking and listening skills, (2) patterns of conflict and expressing negative affect, (3) problem-solving and (3a) hidden agendas, (4) family of origin (5) beliefs and expectations, (6) sexuality and sensuality and (6a) making a contract. (See manuals of Schaap & van Widenfelt, 1990a; 1990b for detailed description of sessions as well as Chapter 8 of this manuscript.)

Each couple worked with their own personal trainer throughout the six sessions. Sessions began with instructions, followed by practicing the skills. Couples received continuous feedback from trainers and were encouraged to practice at home as well. To accommodate the schedules of the trainers and couples, there was usually a week free scheduled between the first three sessions and the last three sessions or somewhere else during the course of the program. Thus the total intervention period was usually spread over seven weeks.

The severely distressed group

The 22 severely distressed couples excluded from the prevention study were offered the possibility of an intervention: either the equivalent of the prevention intervention with the option to continue in marital therapy or marital therapy from the start. This was possible since the University of Nijmegen's Department of Psychology has an outpatient clinic where couples could be treated. Most of the 22 couples asked for an intervention at the start without being asked. Eight received marital therapy in the clinic directly. Ten first participated in the six preventive intervention sessions and then several continued in therapy thereafter: two continued in individual therapy, one continued in couples therapy and whether or not the other seven continued in therapy elsewhere is unknown. Four couples declined an intervention of any sort. No follow-up was conducted on this group of 22 couples.

Post and follow-ups

The intervention couples were asked to fill in additional questionnaires at a post-assessment and the entire group of 67 couples at two follow-up assessments in order to examine differences in intervention, control and decline couples on future relationship satisfaction, functioning and stability. Couples in the prevention study were thus assessed at four time periods; during a pre-intervention assessment to collect baseline data, a post-intervention assessment to assess the immediate effects of the intervention (only intervention participants did post), a nine month follow-up to examine differences between program and control couples and a two year follow-up assessment to evaluate stability of change. See Figure 4.2 for design. See also Table 4.3 for which measures were given at each assessment. In addition, a booster session was conducted between follow-up I and II for the intervention couples which was also used to collect qualitative reports from couples about the intervention.

	T1	Intervention	Post	T2 (Follow-up I)	T3 (Follow-up II)
months	0	1	3	9	24
intervention	x	x	x	x	x
control	x	o	o	x	x

Figure 4.2: Design

Post

Within two weeks after program completion, participants filled out a short evaluation on relationship satisfaction, problem solving ability, problem intensity and relational efficacy. These Post measures were returned through the mail. Control couples were not given this assessment. Strict instructions of the importance of filling in the questionnaires separately were given.

Follow-up I (Time 2)

Nine months from Time 1, (approximately six months after the intervention), couples were sent a letter and packet of questionnaires asking them to fill out several questionnaires separately and return them in a postage paid envelope (each partner had their own envelope). Couples who did not participate in the intervention were also asked to fill out the same questionnaires at approximately the same time. Key measures from Time 1 were repeated at this assessment. At Follow-up I, data were collected on 55 (82%) of the 67 couples. Two couples (3%) had broken up, resulting in questionnaires received from 53 intact couples (79%). Twelve (18%) couples refused to participate in the assessment. See Chapter 9 for results.

Booster session

At one year after Time 1 (approximately nine months following the completion of the intervention), intervention couples were asked to participate in a booster session. This session was tape-recorded and also served as a qualitative evaluation of the program. The trainer conducting the booster session was in almost all cases (except for three cases) the original trainer who trained the couple during the program. Trainers asked the couples how they were and walked through the six original training sessions with them, asking the couple what was useful from the training and what was not. Couples were also asked what they needed help with at this time and if there were aspects of their contract to renew. Twenty of the original 24 intervention couples (83%) participated in the booster session. For more details, see Chapter 8.

Follow up II (Time 3)

Couples were again assessed two years after Time 1 (approximately 1 year and 9 months after completing the intervention), and at about the same time for control and decline couples. Couples were sent a letter to request their

participation. Again couples were asked to fill out a standard set of questionnaires as in the preassessment and postassessment to assess change over time. In addition to the standard set of questionnaires, couples were asked to fill in a questionnaire about their parents conflict tactics (an adapted version of the CTS proposed by Notarius (personal communication, 1990) in which "I" and "partner" were replaced with "mother" and "father"). For example, the item "*I* threw something at my *partner*" was changed to "My *mother* threw something at my *father*."

The set of questionnaires took approximately 45 minutes to complete. Couples who were not able to come into the lab, were sent the identical set of questionnaires and asked to complete them separately. For those couples that were able to come to the lab, following the filling in of the questionnaires, couples were asked to talk for 15 minutes about their highest rated area of conflict (again partner scores on question 1a of the MAP were summed). Next, the couple was interviewed for approximately 45 minutes: first briefly about their relationship (e.g., looking back over the years what were the good times and bad time and how did you get through them?) with the greater part of the interview focused on the influence of their family of origin on their current relationship (a. tell me about your families of origin and your parents marriage, b. what is the influence of these experiences on the relationship you have with each other?) (Interview questions were adapted from a family of origin Interview (Wamboldt, 1992) and the Oral History Questionnaire (Buehlman, Gottman, & Katz, 1992).

Thirty-eight couples of the original 67 responded (57%). Three additional couples had broken up by then, resulting in the completion of questionnaires by 35 (52%) couples of the 67 original couples. Thus, by Follow-up II, five couples had broken up (7%) and 27 couples (40%) refused further participation in the study. For follow-up results based on the self-report outcome, see Chapter 9.

Measures

(For an overview of when the questionnaires were administered, see Table 4.3.)

Personal History Questionnaire (PHQ; Van Widenfelt, Schaap, & Verdellen, 1990). This form covers demographic and background information about the subject including age, ethnic background, employment history, education, income, religion, previous therapy experience, and number of siblings. In addition, specific questions about parental mental and marital health status and divorce are asked about. A life events list is included as well.

Interpersonal Problem Solving Inventory (IPSI; Lange, 1983; Lange, Markus, Hageman, & Hanewald, 1991). The IPSI is a Dutch self-report measure of problem solving ability consisting of 17 items. For each item is a five-point response range: ranging from "does not apply to us" to "is very applicable for us" (in the last month). Higher scores reflect better problem solving ability. A reliability and validity study on the IPSI reveals Chronbach alphas as follows: for males a = .86, females a = .88 and for the couple score a = .90. The validity of IPSI was also found to be satisfactory. The IPSI discriminates well between distressed and nondistressed couples. We also found the scale to be very reliable for the present sample: Chronbach alphas for males a = .92; for females a = .93 (N= 89 couples).

Maudsley Marital Questionnaire (MMQ; Cobb, McDonald, Marks, & Stern, 1980). The MMQ is a self-report measure of marital satisfaction. Originally a 50 item questionnaire, later the MMQ was shortened to a 20 item scale, each item comprising a response range from 0-8. The measure is comprised of three subscales: marital satisfaction (10 items), sexual satisfaction (5 items) and general life satisfaction (5 items). The measure was translated and validated for the Dutch population (Arrindell, et al., 1983; Arrindell, Emmelkamp, & Bast, 1983; Arrindell & Schaap, 1985). The MMQ has been found to have high internal consistency, and sufficient test-retest reliability and validity. Chronbach alphas on the marital satisfaction subscale for distressed (clinic) couples, for males a = .89, females a = .84 and for nondistressed (normals), for males a = .87, a = .88. In the present study Chronbach's alphas were obtained on the marital satisfaction subscale for males, a = .93 as well as for females, a = .93 (N=89). Chronbach alphas for the sexual satisfaction scale, males and females respectively, were a = .86, a = .79 (N= 89) and for the general life satisfaction scale, males and females respectively, a = .57, a = .66 (N=89).

Marital Agendas Protocol (MAP; Notarius & Vanzetti, 1983). This instrument assesses relational efficacy, as well as problem intensity. The MAP indexes the expectancy of relational success, in other words, the partners confidence in the couple's ability to resolve problems. Ten relationship areas are presented in four questions. In one of the questions, relational efficacy is assessed by asking partners to rate how many out of ten discussions about a problem does he or she believe will be resolved to their mutual satisfaction. We added two problem areas to the original ten areas in the American scale relevant for the Dutch

Table 4.3
Constructs, measures, and when assessed

	construct	measures	T1	Post	T2	T3
	SELF REPORT RELATIONSHIP					
1	relationship satisfaction	MMQ	x	x	x	x
2	sexual satisfaction	MMQ	x	x	x	x
		MSI	x			
3	problem intensity	MAP	x	x	x	x
4	relational efficacy	MAP	x	x	x	x
5	problem solving ability	IPSI	x	x	x	x
6	destructive communication	CSI	x			
7	verbal aggression	CTS	x		x	x
8	physical aggression	CTS	x		x	x
9	aspects and style of conflict	CIR lab	x			
		CIR home	x			
10	avoidance of conflict	CSI	x			
		CIR lab	x			
		CIR home	x			
11	intimacy	IS	x			
		CSI	x			
12	commitment (dedication)	CI	x			
	OBSERVATIONAL					
13	problem solving behavior	COMFI	x			
14	emotional expressive behavior	COMFI	x			
15	self disclosure behavior	COMFI	x			
	PSYCHOLOGICAL .HEALTH					
16	Parental psychiatric history	PHQ	x			
17	current health symptoms	SCL 90	x		x	x
18	psychiatric history	PHQ	x			
19	current life events	PHQ	x		x	x
20	current general life satisfaction	MMQ	x		x	x
	DEMOGRAPHICS					
21	current marital status	PHQ	x		x	x
22	number of years together	PHQ	x		x	x
23	age	PHQ	x		x	x
24	religion	PHQ	x		x	x
25	children	PHQ	x		x	x
26	education	PHQ	x		x	x
27	occupation	PHQ	x		x	x
28	own previous divorce or break up	PHQ	x			
29	separation, break up or divorce			x	x	x
	FAMILY OF ORIGIN					
30	parental divorce	PHQ	x			
31	conflict in family of origin	FES	x			
32	parental marital conflict	CTS (parents)				x
		PHQ	x			
33	parental marital quality	PHQ				
	(childhood)		x			
	(adolescence)		x			
34	parental psychopathology	PHQ	x			
35	parental death	PHQ	x			
36	parent-child relationship	PHQ				
	(childhood)		x			
	(current)		x			

couple population: (1) role division and (2) women's rights. The measure was translated for use in this study (Van Widenfelt & Schaap, 1990).

The measure is found to be reliable and valid in a series of studies conducted in America. Test-retest reliability on the MAP over a period of one to three weeks is .81 (Notarius & Vanzetti, 1982). We found the measure to be reliable in the present study: Chronbach's alphas for relational efficacy (MAP question 2) were a = .82 and a = .81 for males and females respectively (N= 89). For problem intensity ratings, chronbach alphas for males and females respectively were a = .75 and a = .80 (N=89). Chronbach's alphas for the attribution scale were quite low (a = .52, a = .48 for males and females respectively, N= 89) and thus was further eliminated from analyses. An additional reliability and validity study was done for the Dutch population by de Beurs (See Vanzetti, Van Widenfelt, & de Beurs, 1992).

Communication Skills Inventory (CSI; Kerkstra, 1985; Schaap, Buunk, & Kerkstra, 1988). This Dutch questionnaire contains 50 items, each item is rated on a 5 point scale ranging from "never" to "very often". The questionnaire is made up of three empirically based subscales: destructive communication (18 items), avoidance (8 items) and intimacy (11 items). Kerkstra reports Chronbach's alphas for males and females respectively of a = .90 and a = .89 for destructive communication, a = .83 and a = .87 for intimacy and a = .87 and a = .82 for avoidance (N=101). In a replication study, on 138 couples she reports Chronbach's alphas for males and females respectively: a = .82, a = .86 for destructive communication, a = .77, a = .82 for intimacy, and a = .72, a = .71 for avoidance. We replicated this factor structure and also found the measure to be reliable: Chronbach's alphas for males and females respectively: destructive communication: a = .90, a = .91; avoidance: a = .81, a = .82 and for intimacy a = .86, a = .89 (N=89).

Sexual Sensual Functioning, subscale of the Marital Satisfaction Inventory (MSI; Snyder, Wills, & Kesler, 1981). This subscale of the MSI is composed of twenty nine items that assess satisfaction with frequency and quality of sensual/sexual activity. Twenty-nine items are listed and subjects can respond with true or false. Snyder reports the scale to have good reliability and to discriminate between distressed and nondistressed couples. The scale was translated for use in this study. The scale proved to be reliable for this sample (KR 20 = .88, .89 for males and females respectively, N = 89.)

Conflict Tactics Scales (CTS; Straus, 1979). This questionnaire measures three forms of marital conflict tactics: reasoning, verbal aggression, and physical violence. The CTS has been widely used and has good reliability and validity. It is a 40 item scale with a six point answer range. Respondents answer 20 questions about themselves and then 20 about their partners. The measure consists of three subscales: reasoning scale (3 items),verbal aggression scale (6 items), physical violence scale (9 items). We translated the measure for the purposes of this study. The translated version was included in a second validation study by de Beurs (Vanzetti et al., 1992) as well. We were primarily interested in the verbal aggression subscale: Chronbach's alphas for males: self a = .72, partner a = .84 and for females self a = .87 and partner a = .83. For physical aggression: alphas for males: self a = .58, partner a = .81 and for females self a = .78 and partner a = .78 (N =89). For the reasoning scale, Chronbach's alphas were very low for both males: self a = .58, partner: a = .47 and females: self a = .53, partner a = .43 and was thus eliminated from further analyses.

Commitment Inventory (CI; Stanley, 1986; Stanley & Markman, 1992). The CI is based on a measure originally developed by Johnson (1978) and assesses two types of commitment: personal dedication and constraint commitment. Personal dedication refers to an intrinsic desire to work on, improve and stick with a relationship. Constraint commitment refers to the extrinsic forces that serve to make relationships continue, such as financial and social pressures. The scale items are answered on a 7-point Likert scale anchored from "strongly agree" to "strongly disagree".

Reliability and validity of the CI have been established by Stanley (1986; Stanley & Markman, 1992). We translated the short version of the questionnaire, the dedication and constraint subscales, into Dutch for the purposes of this study (van Widenfelt & Schaap, 1990). Reliability on the dedication scale was adequate (Chronbach's alphas for males a = .78 and females a = .77), whereas for the constraint scale alphas were quite low (a = .38 males and a = .48 females; N=89). The constraint scale was therefore further eliminated from analyses.

Hopkins Symptom Checklist (SCL-90 R; Derogatis, 1977; Arrindell & Ettema, 1986). The SCL-90 is the most popular instrument for measuring psychological adjustment or health symptoms. It has excellent psychometric properties. An overall Chronbach's of a = .95 for the scale as a whole has been reported (Derogatis, 1977). Internal consistency coefficients that range from .70 to .90 have

been reported for the nine primary symptom dimensions (Derogatis, 1977). Test-retest reliability coefficients ranging from .78 to .94 have been reported for the nine primary scales over different time intervals (Derogatis, 1977). The SCL-90 was translated and validated for the Dutch population by Arrindell and Ettema (1986). In our sample the total score of the SCL proved to be very reliable (Chronbach's alphas for males .97 and females .98, N = 89).

Intimacy Scale (IS; Schaap, van Widenfelt, & Ebbeng, 1990). The IS was developed for the purposes of the present study. At the time the study began to our knowledge there were no Dutch scales available for measuring intimacy. We decided to develop a new scale based on a previous study by Bus (1989), in which the construct of intimacy was studied using the Delphi-method. From this study, 45 terms were derived that were associated with the term intimacy. We put 42 of these terms in a questionnaire format, where respondents could rate the items on a five point scale as to what degree the item characterized their relationship, ranging from "not at all" to "very much". Items included terms such as, "warmth", "tenderness", "safety", "being yourself", "love", "trust", "being open", "being on the same wavelength" to name a few. The scale proved to be very reliable in the present sample (Chronbach's alphas for males a = .97 and females a = .98, N = 89).

Family Environment Scale (FES; Moos & Moos, 1981). The FES is a scale made up of 99 items about how a family member experiences and views their family. There are 11 items for each of the nine categories. Each item is answered with "yes" or "no". The scale has been translated for the Dutch population by de Coole and Jansma (1983), who have also done the work on norms, reliability and validity for the Netherlands on a sample of 514 persons from 165 families with mixed results. In the present study we used the scale with instructions for each partner to rate their family of origin during their childhood (through age 18) using the scale. We were particularly interested in one of the nine categories: conflict. The conflict subscale consists of 11 items, such as, "We fight a lot in our family", "Family members often criticize each other", "Family member sometimes hit each other". For the conflict subscale, KR 20 = .59 and .63 for males and females respectively for the present sample.

Conflict Interaction Record (CIR; Buunk, Schaap, & Prevoo, 1990; Schaap, 1990; Schaap, Buunk, & van Widenfelt, 1990). The CIR (home version) is a self-monitoring instrument for recording relationship conflicts. Subjects are asked to answer specific questions regarding the conflicts they experience with their

partner over a two week period. The questionnaire is based on the Rochester method (Wheeler & Nezlek, 1977) and the work of Peterson (1979, 1983), describing the trajectories of conflict. The instrument is made up of six parts in which respondents first report the time, date, duration and topic of the conflict. Next, respondents are presented with a checklist of emotions experienced before the conflict started as well as a checklist of what the respondents attribute these emotions to. The purpose here being to get a rating of the amount of stress the subject experienced prior to the onset of the conflict. Further, conflicts are rated in terms of intensity, stability, who initiated the conflict, the conflict style used to deal with the conflict, how the conflict ended and the stress experienced immediately following the conflict. The stress subscale is based on the Complaints subscale of the Stress in Organization Scale (VOS; Van Dijkhuizen, 1984). Conflict style items were empirically based using factor analyses wherein three factors resulted: (1) avoidance, (2) compromising and problem-solving, (3) and pushing-aggression (Schaap, 1990).

Conflict Interaction Record (lab version) (CIR; Schaap, van Widenfelt, Buunk, & DiMiranda (1990). The CIR lab version is an adapted version of the CIR (described above) for use in the laboratory setting. Couples are asked to complete the measure directly after a high conflict area discussion in the lab setting in regard to the discussion.

Codebook of Marital and Family Interaction (COMFI; Notarius, Pellegrini, & Martin, 1990). COMFI is a micro-analytic coding system used to code the problem discussion in this study. It integrates features from several other coding systems, including Couples Interaction Scoring System (CISS; Gottman, 1979; Notarius & Markman, 1981), Affective Style (Doane, West, Goldstein, Rodnick & Jones, 1981), Marital Interaction Coding System (MICS; Hops, Wills, Patterson, & Weiss, 1972), and Kategoriensystem für partnerschaftliche Interaktion (KPI; Hahlweg et al., 1984).

The coding system requires the assignment of one of 32 mutually exclusive codes to each spoken thought. Content, affect and function are accounted for in each code. By combining these aspects of a message in the assignment of one code, the coding system allows for the capturing of complex and subtle phenomena, such as sarcasm. The 32 codes are organized into six summary categories: problem solving facilitators (PSF), problem solving inhibitors (PSI), emotional validators (EMV), emotional invalidators (EMI), self-disclosures (SDS), and depressives (DEP). Haefner, Notarius, and Pellegrini (1991) report the

following alphas for the first four summary categories: PSF a = .89, PSI a = .60, EMV a = .98 and EMI a = .91. See Method section of Chapter 5 for a description of the summary categories.

In the present study, 88 of the 89 couple discussions were coded. One couple's discussion could not be coded due to technical disturbances during taping, making it too difficult to hear what the partners said. All interactions were first transcribed verbatim, then the transcripts were broken down into grammatical (thought) units, which were marked and numbered. The "thought" units were usually separated by commas, periods, or "ands" and "buts". Coders first watched the videotaped interaction once entirely. Next, each "thought" unit (or clause) was assigned a code, resulting on average 600 codes for each 20 minute discussion. As 15 minutes is considered adequate (Gottman & Krokoff, 1989), the 20 minute discussion was sufficient for the present purposes.

Five coders coded the interactions. Coders were first trained on a set of training tapes: Three training tapes of American couples from the lab of Notarius, in which their key was used as a standard and four Dutch couple tapes for which additional keys were made. The training of the coders and the coding of the data took a period of two and a half years. We began with four coders and one was asked to stop during the training due to low reliability and poor team work. In a later phase a second stopped after coding a few tapes due to personal reasons. Two coders continued from the initial group and for the last group of tapes, two new coders were trained and remained under the supervision of the previous coders and the team leader.

Cohen's kappa's (1960) were calculated to assess inter-observer reliability and were satisfactory. First, reliability's on the American training tapes was calculated. Reliability on individual codes, using kappa, averaged .56 (range .39 - .75), observed agreement averaged .64 (range .48 - .81). Reliability of the summary codes, using kappa, averaged .61 (range .39 - .78), and observed agreement averaged .75 (range .55 - .88). Following the three America training tapes, coders then coded four Dutch tapes to train in using the system in a Dutch population. Reliability on individual codes, using kappa, averaged .58 (range .39 - .75), and observed agreement averaged .61 (range .52 - .75). For the summary categories, reliability using kappa, average .58, (range .42 - .69) and observed agreement averaged .73 (range .63 - .81).

Upon completion of training, coders coded the data, during this time reliability checks were periodically done on approximately 25% of the discussions

coded. Training meetings continued weekly throughout the coding of the data. Reliabilities on individual codes, using kappa, averaged .61 (range .48 - .69), and observed agreement averaged .68 (range .55 - .74). Summary categories resulted in average reliability's, using kappa of .64 (range .51 - .71) and observed agreement average of .76 (range .64 - .80). (See Table 4.4 for overview of reliabilities.) These kappa's are similar to what Haefner, et al. (1991) report (.61). Coders were blind to the status of couples as well as when coding assignments were used as reliability checks.

Table 4.4
Kappas and observed agreement for COMFI coding

	individual codes		summary codes	
	kappa	obs. agre.	kappa	obs. agre.
US training tapes (n = 3)	.56	.64	.61	.75
Dutch training tapes (n = 4)	.58	.61	.58	.73
Final sample(n = 88)	.61	.68	.64	.76

Note on marital status

In addition to married couples, couples who lived together and lived apart with a committed relationship were included in the present study. In most research studies on couples in the USA, this is not the case. These couples were included in the present study since in the Netherlands, reasons for marrying differ from the United States, including the timing of marriage. Thus, many couples who are not married in the Netherlands have been together for a long time and are very committed. Because of this difference with American culture, differences were tested for married, cohabiting, and living apart couples on demographic, self-report relationship variables and observed communication behavior.

On demographic variables, not surprisingly married couples were significantly older, longer together, and more often had children than couples who cohabited or lived apart. There were no significant differences, however, on several self-report relationship variables between the three groups (relationship satisfaction, relational efficacy, and problem intensity). See Table 4.5.

Relative frequency of four behavioral categories of COMFI were examined (problem solving facilitating, problem solving inhibiting, emotional validation, and emotional invalidation), and for women there were two categories in which

there were significant differences between groups. More specifically, married women appeared more negative and less positive than cohabitors and LAT couples.

In sum, though there were some differences between groups, couples of the three marital status categories were evenly distributed among the distressed and nondistressed groups (see Table 4.5) and it is thus concluded that it is quite unlikely that marital status will influence the testing of the main hypotheses of the study.

Table 4.5
Differences in marital status on demographic, self-report relationship variables and four types of communication behavior

variables	males N=89 married n=45	cohabit. n=28	LAT n=16		females N=89 married n=45	cohabit. n=28	LAT n=16	
	$\bar{x}$ (sd)	$\bar{x}$ (sd)	$\bar{x}$ (sd)	F (2,86)	$\bar{x}$ (sd)	$\bar{x}$ (sd)	$\bar{x}$ (sd)	F (2,86)
Nr years together	12.2 (8.5)	4.4 (2.5)	3.3 (1.8)	17.40***				
Age (years)	40.0 (8.7)	35.9 (9.0)	32.8 (12.0)	3.97 *	36.6 (9.0)	33.0 (7.1)	29.3 (7.8)	5.0 **
Relationship dissatisfaction	21.0 (16.3)	15.7 (10.7)	19.8 (13.9)	1.17	23.1 (15.5)	16.8 (13.2)	20.3 (18.3)	1.47
Relational efficacy	90.9 (18.8)	96.5 (14.0)	93.4 (19.8)	0.89	90.9 (20.6)	98.8 (13.0)	89.4 (22.9)	1.86
Problem intensity	256 3 (159.8)	204.9 (119.2)	223.3 (170.1)	1.06	259.4 (158.5)	187.3 (128.1)	265.2 (258.1)	1.76
Problem solving facilitation	29.7	33.9	35.4	ns	29.6	31.6	29.7	ns
Problemsolving inhibiting	20.4	17.5	18.6	ns	22.2	17.2	14.2	*
Emotional validation	21.8	23.0	20.4	ns	16.5	23.6	30.5	***
Emotional invalidation	18.2	17.1	17.7	ns	22.9	20.1	17.5	ns

* = $p < .05$
** = $p < .01$
*** = $p < .001$

PART II

COMMUNICATION, RELATIONSHIP SATISFACTION AND GENDER

Chapter 5

Problem-solving and emotional expression in couples: The impact of gender and distress

The relations among relationship distress, gender, and communication behavior were studied using videotaped problem-solving discussions of eighty-nine Dutch couples. The videotaped interactions were coded with COMFI (Notarius, Pellegrini, & Martin, 1990) and the frequency of communication behaviors and the sequential patterning of messages were assessed. Previous studies found that males and females in distressed and nondistressed relationships communicated differently. In the present study, it was hypothesized that gender differences would be more pronounced in the communication of distressed couples. In line with previous findings, frequency analyses revealed differences between distressed and nondistressed couples: distressed couples demonstrated significantly less problem solving facilitating, more problem solving inhibiting, less emotional validation and more emotional invalidation than nondistressed couples. One significant gender difference was found: females demonstrated more emotional invalidation compared to males. Distressed couples did not, however, demonstrate more pronounced gender stereotyped behavior than nondistressed couples. Sequential analyses revealed different patterns of interaction characterizing distressed and nondistressed couples. Again, these different patterns were not gender linked. Thus, despite the widespread acceptance of interactional differences between men and women in contemporary relationships by the popular press, this study failed to provide evidence in support of this belief. In fact, the data revealed more similarities than differences between males and females, independent of level of relationship distress. The findings are discussed in terms of the literature, cross cultural differences, as well as methodological issues in the study of interaction in close personal relationships.

Van Widenfelt, B., Schaap, C., Notarius, C. I., & Hosman, C. (submitted). Problem-solving and emotional expression in marital dyads: The impact of gender and distress.

INTRODUCTION

The negative effects of marital conflict and divorce on the health and well being of partners and offspring has been the main driving force for research on relationship quality and divorce (Amato & Keith, 1991; Bloom, Asher, & White, 1978; Burman & Margolin, 1992; Emery, 1982; 1988; Kiecolt-Glaser, et al., 1987; 1988; 1993). In particular, many studies have been conducted to better understand how distressed couples differ from nondistressed couples, namely in terms of conflict management. From this literature, a relationship between observed communication and relationship adjustment has been established. When observed during a problem solving discussion, distressed couples demonstrate more negative affect, poorer problem solving, criticism, complaining, defensive behavior and sarcasm than nondistressed (Birchler, Weiss, & Vincent, 1975; Gottman, Markman, & Notarius, 1977; Gottman, 1979; Halford, Hahlweg, & Dunne, 1990; Schaap, 1982; Vincent, 1972; Vincent, Weiss, & Birchler, 1975).

Several studies also provide evidence for gender differences in observed communication both longitudinally and concurrently. Wives are described as more negative in their communication than husbands (Notarius & Johnson, 1982; Schaap, 1982), especially distressed wives (Notarius, Benson, Sloane, Vanzetti, & Hornyak, 1989). In addition, distressed wives are found to be much less likely than nondistressed wives and husbands to offer a positive response after a negative exchange. Wives are found to complain and criticize (Hahlweg, Reisner, Kohli, Vollmer, Schindler, & Revenstorf, 1984; Margolin & Wampold, 1981) and to be more coercive than husbands (White, 1989). Husbands are described as more avoidant and withdrawn than wives (Schaap, 1982) and less verbally responsive and expressive than their wives (Levenson & Gottman, 1983; Notarius & Johnson, 1982). Gender-linked communication behaviors also appear to play a role in the etiology of marital distress. Gottman and Krokoff (1989) found that stubbornness, whining and withdrawal on the part of husbands to be predictive of decline in marital satisfaction over a three-year period.

A gender-related demand-withdrawal pattern in couples has been described in the literature (Baucom, Notarius, Burnett & Haefner, 1990; Buunk, Schaap, & Prevoo, 1990; Christensen, 1988; Markman & Kraft, 1989; Noller & Gallois, 1988; Notarius & Johnson, 1982; Notarius, 1990). When confronted with a high-

conflict situation, the following cycle occurs: husbands withdraw, wives attempt to engage their husbands, husbands withdraw more, wives try to engage the husbands with greater negativity, and husbands distance themselves even more. This pattern of cycling results in increased negativity and lack of problem resolution for distressed couples.

Despite provocative findings of gender-linked communication in couples, the relationship between gender, distress and communication behavior, however, has not been well analyzed. Many of the studies on gender differences have failed to look at relationship satisfaction as a related variable. Further, many studies on the relationship between communication behavior and relationship satisfaction have failed to look at this relation as a result of gender-linked communication patterns. Thus it is not clear if the observed differences in communication are reflective of gender-linked communication behavior or are related to relationship distress. Secondly, many of the observational studies conducted thus far are limited by failure to use an exhaustive coding system to analyze the communication data. Additionally, studies suffer from limited samples and are primarily composed of white middle-class Americans.

Purpose of the present study

The present study examines the impact of gender and distress in problem solving and emotional expressive behavior by observing communication patterns of couples in the Netherlands. Based on the literature, it was hypothesized that in a problem-solving discussion, female partners would be more emotionally expressive than male partners. More specifically, compared to male partners, communication behaviors of female partners was hypothesized to be characterized by more self-disclosure, emotional validation and emotional invalidation. Further, compared to female partners, the communication behavior of male partners was expected to be characterized by more problem-solving facilitating and problem-solving inhibiting statements.

Secondly, it was hypothesized that the behavior of male partners and female partners would be interdependent in a problem-solving discussion. A cyclical pattern would be evident in problem-solving discussions of distressed couples wherein male partners' withdrawal and conflict-avoidant behavior would be followed by female partners' conflict-engaging behavior and emotional expressive behavior and vice versa. Thirdly, relationship distress was hypothesized to be associated with interactional behavioral differences between

male and female partners. Lower relationship adjustment was expected to be related to more pronounced gender-linked communication behavior.

METHOD

Subjects

Eighty nine couples participated in the current study. There were no significant differences between distressed and nondistressed couples in marital status, education, religion, age, or number of years married (all $p > .20$). Significantly more distressed couples had children (55%) than nondistressed couples (30%) C^2 (1) = 5.70; $p = .017$. See Table 5.1 for an overview of demographic data.

Table 5.1
Demographic characteristics of the total sample and the nondistressed and distressed couples separately

	total sample (N= 89)		nondistressed (n = 47)		distressed (n = 42)	
children (n, %)	37 (42%)		14 (30%)		23 (55%)	
marital status (%)	51		49		52	
married	33		34		31	
cohabiting	17		17		17	
LAT						
nr of yrs together ($\bar{x}$, sd)	8.0 (8.0)		6.9 (6.7)		10.0 (8.2)	
	males	females	males	females	males	females
age (years) (x, sd)	37.0(10.0)	34.0 (9.0)	36.2(10.4)	32.5 (8.0)	38.7 (8.9)	36.0 (8.9)
religion (%) Catholic	39	42	43	40	36	43
Protestant	6	5	6	9	5	0
other	4	7	6	4	2	10
none	51	47	45	47	57	48
education (%) university	26	19	26	23	26	14

Recruitment strategy and selection criteria

Couples were recruited over a two year period primarily by popular media, including newspaper articles, advertisements and radio interviews, as well as distribution of posters and pamphlets. Couples responded to advertisements soliciting couples for a research study on relationship development and communication. The criterion for participating in the study

was a committed relationship of at least one year with plans for a future together. Both partners were required to participate.

Procedure

Couples were asked to participate in an assessment which entailed being videotaped during a problem solving discussion and filling out an extensive battery of questionnaires about risk indicators and factors related to relationship functioning as part of a larger study. Each partner completed an informed consent form. After the assessment, participants were given a popular Dutch book co-authored by the second author on relationships in appreciation of their participation.

Partners separately completed a set of questionnaires with an interviewer present to answer questions. Next, couples were videotaped during a discussion for approximately ten minutes on how they first met to help acclimate them to the videotaping situation. The couple was then asked to discuss their top problem area for an additional twenty minutes. The problem area was chosen by the interviewer in the following way: Partner scores on problem intensity ratings, question 1a of the *Marital Agendas Protocol* (MAP; Notarius & Vanzetti, 1983), were summed and the highest rated problem area was selected by the interviewer and presented to the couple. Couples were instructed to discuss the problem and try to come to a mutually satisfying solution.

Measures

Personal History Questionnaire (PHQ; Van Widenfelt, Schaap, & Verdellen, 1990). The PHQ was constructed for the present study to gather relevant background information. This form covers demographic and background information about the subject including age, education, and religion as well as information about the relationship.

Maudsley Marital Questionnaire (MMQ; Cobb, McDonald, Marks, & Stern, 1980). The MMQ is a 20 item self-report measure of relationship satisfaction. Each item comprises a response range from 0-8. The measure is comprised of three subscales of which for the present purposes the relationship satisfaction (10 items) subscale was used. The measure was translated and validated for the Dutch population (Arrindell, Boelens & Lambert, 1983; Arrindell, Emmelkamp, & Bast, 1983; Arrindell & Schaap, 1985) and found to have high internal consistency, and sufficient test-retest reliability and validity. In the present study,

Chronbach's alphas for the relationship satisfaction subscale were obtained for males, a =.93 as well as for females, a =.93 (N=89).

Based on summed partner scores on the Dutch version of the MMQ (Arrindell et al., 1983) relationship satisfaction subscale, couples were classified as nondistressed (couple sum score 0-40) and distressed. The distressed group consisted of mildly distressed (couple sum score of 41-70) to severely distressed (couple sum score above 70 and/or score difference greater than 15 and/or request for marital therapy). Fifty-three percent were nondistressed and 48% were distressed. The two groups scored significantly different on the MMQ relationship satisfaction subscale for which nondistressed couples had a mean sum score of 17.5 (SD = 10.2) and the distressed couples had a mean sum score of 63.9 (SD = 20.6) ($t = -13.22$, $p < .001$). There were no significant differences between males and females on reports of relationship satisfaction.

Marital Agendas Protocol (MAP; Notarius & Vanzetti, 1983). This instrument was used in the present study to assess problem intensity. The measure was translated for use in this study (Van Widenfelt & Schaap, 1990) and two problem areas were added to the original ten areas in the American scale. Calculated for the sample as a whole, top problem areas for males were (1) communication, (2) sex and (3) role division; top three problem areas for females were: (1) communication, (2) sex and (3) money.

Conflict Interaction Record (CIR; Buunk, et al., 1990; Schaap, 1990). The CIR is a Dutch instrument devised to assess the characteristics and the course of conflicts. The present version has been adapted for the laboratory situation. Couples are asked to complete the measure directly after the problem discussion task in the lab. The questionnaire is based on the Rochester method (Wheeler & Nezlek, 1977) and the work of Peterson (1979, 1983), describing the trajectories of conflict. The CIR consists of six parts. For the purposes of the present study, the subscale Complaints of the Stress in Organization Scale (VOS; Van Dijkhuizen, 1984) was used. Partners indicate how they felt after the conflict ended by means of an 11-item scale naming emotions such as irritation, depression, anger, and cheerfulness. Each item is rated on a 5-point scale reflecting a valuation of the amount of stress a subject is experiencing. Chronbach's alphas were obtained for males, a = .87 as well as for females, a = .91 (N=89). Males reported a mean stress level of 22.7 (SD 7.5) and females 25.1 (SD 9.3). Scores of the partners on the stress scale were averaged to yield one stress score for each couple, resulting in a

mean stress level of 23.9 (SD 6.9), Chronbach alpha was calculated for the couple scores, a = .89.

Codebook of Marital and Family Interaction (COMFI; Notarius, Pellegrini, & Martin, 1990). COMFI is a micro-analytic coding system used to code the problem discussion in this study. It integrates features from several other coding systems, including Couples Interaction Scoring System (CISS; Gottman, 1979), Affective Style (Doane, West, Goldstein, Rodnick & Jones, 1981), Marital Interaction Coding System (MICS; Hops, Wills, Patterson, & Weiss, 1972), and KPI (Hahlweg et al., 1984). The coding system requires the assignment of one of 32 mutually exclusive codes to each spoken thought. Content, affect and function are accounted for in each code. By combining these aspects of a message in the assignment of one code, the coding system allows for the capturing of complex and subtle phenomena, such as sarcasm. The 32 codes are organized into six summary codes: problem solving facilitators (PSF), problem solving inhibitors (PSI), emotional validators (EMV), emotional invalidators (EMI), self-disclosures (SDS), and depressives (DEP). Haefner, Notarius, and Pellegrini (1991) report the following alphas for the first four summary categories: PSF a = .89, PSI a = .60, EMV a = .98 and EMI a = .91.

The summary categories PSF and PSI represent the problem solving domain. PSF statements move the problem solving process forward. This is done by exploring or discussing the problem, keeping the discussion focused, positively commenting on the ongoing communication process, accepting responsibility for the problem, proposing a solution for the problem, and requesting clarification. PSI statements retard progress in problem-solving. This is done by criticizing the discussion process, denying, minimizing or excusing the problem, placing all the responsibility for the problem on another or criticizing a person not present, refusing the possibility of a solution, proposing a ridiculous solution, as well as by irrelevant talk.

The summary categories EMV and EMI represent the summary categories in the affective or emotional domain of communication. EMV and EMI are affect-laden statements explicitly or implicitly about the partner the participant is having a discussion with. EMV statements show support or concern for the other speaker through agreement, paraphrasing, summarizing, praise, support, understanding or asking about the other's feelings. EMI statements undermine the other speaker through disagreement, criticism, mindreading, guilt induction, emotional control, ignoring or sarcasm.

The last two categories, SDS and DEP are also affect-laden statements and are about the speaker. SDS statements are positive descriptions of the self or disclosures about feelings, beliefs, needs or wishes. DEP statements are associated with speech of depressed persons, including dysphoric feelings, making negative statements about oneself, and describing a psychological or physical condition, symptom or state as an excuse.

In the present study, 88 of the 89 couple discussions were coded. One couple's discussion could not be coded due to technical disturbances during taping, making it too difficult to hear what the partners said. Five coders coded the interactions. Cohen's kappa (1960) were calculated to assess inter-observer reliability and were satisfactory. Upon completion of training, coders coded the data, during this time random reliability checks were periodically done on approximately 25% of the discussions coded. Training meetings continued weekly throughout the coding of the data. Reliability's on summary categories resulted in average reliability's, using kappa of .64 (range .51 - .71) and observed agreement average of .76 (range .64 - .80). These kappa's are similar to what Haefner, et al. (1991) report and are satisfactory. Coders were blind to the status of couples.

All interactions were first transcribed verbatim, then the transcripts were broken down into grammatical (thought) units, which were marked and numbered. Coders first watched the videotaped interaction once entirely. Next, each "thought" unit was assigned a code, resulting on average 600 codes for each 20 minute discussion. As 15 minutes is considered an adequate sample of behavior (Gottman & Krokoff, 1989), the 20 minute discussion was sufficient for the present purposes.

Data analyses

ANOVA's were used to test the predictions. Distress was treated as a between-subject variable and gender as a within-subject variable. The dependent variables were the coded relative frequency data and the sequential data. Lag-sequential analysis (Bakeman & Gottman, 1986) was used to test predictions about sequential patterning in the interactions. Analyses yielded conditional probabilities and within-couple Z-scores for each partner which indexed the sequences found to characterize each couples interaction (Allison & Liker, 1982; Bakeman & Gottman, 1986; Gottman, 1979).

Power of the analysis of variance with the present sample was calculated according to guidelines proposed by Cohen (1977) for both main effects of gender and distress and for an interaction effect between gender and distress. For testing main effects, the average n per cell is 44. (That is, 47 nondistressed women, 47 nondistressed men, 42 distressed women, 42 distressed men). According to formula 8.3.4 on page 365 of Cohen (1977) the N is adjusted resulting in N' = 45. For main effects this N results in a power of (1 - beta) = .96 to detect large effects, a power of (1 - beta) = .65 to detect a medium size effect and a power of (1 - beta) = .15 to detect a small effect. Thus, the chance to make a type II error, if the actual effect is only small is 85% with the current sample size, which can be considered insufficient. However, the power is sufficient to detect medium or large size effects.

For testing gender x distress interaction effects, the N is adjusted resulting in N'= 30. For interaction effects this N results in a power of (1 - beta) = .93 to detect large effects, a power of (1 - beta) = .55 to detect a medium size effect, and a power of (1 - beta) = .12 to detect a small effect. Thus, the sample size is sufficient to detect gender x distress interactions if they are large. However, the chance of making a type II error if the actual effect is medium is 45% and increases to 88% if the actual effect is small. Therefore, if the hypothesized interaction effects are of small or medium size, then the current sample size is insufficient.

In sum, the number of subjects in the current sample is sufficient to detect medium and large main effects and large interaction effects of gender and distress. It is, however, not sufficient to detect medium or small interaction effects. Increasing the number of couples in the present study was not feasible for practical reasons.

RESULTS

Relative frequencies of summary codes

Main effect: Gender differences in expressiveness and problem solving communication

The data were first analyzed to examine gender differences in frequency of communication behavior during a problem discussion. Relative frequencies were calculated for the summary categories: problem solving facilitators (PSF),

problem solving inhibitors (PSI), emotional validators (EMV), emotional invalidators (EMI), self-disclosures (SDS), and depressives (DEP) (the dependent variables) for both males and females. Differences between male and female partners and distressed and nondistressed couples were tested with ANOVA's. The results revealed that irrespective of distress level, female partners demonstrated significantly more EMI behaviors than males. Irrespective of distress level, there were no significant differences between male and female partners on PSF behaviors, PSI behaviors, EMV behaviors and SDS behaviors. See Table 5.2.

Table 5.2
Probabilities in frequency of communication behaviors of distressed and nondistressed men and women (probabilities are multiplied by 100 to improve readability of the table)

	distressed (n = 41)				nondistressed (n = 47)						
	males		females		males		females		F(1, 86)		
	$\bar{x}$	sd	$\bar{x}$	sd	$\bar{x}$	sd	$\bar{x}$	sd	gender	distress	interact.
PSF	28.0	10.8	27.6	8.9	35.6	10.9	32.6	11.1	2.99	9.93**	1.61
PSI	25.0	11.9	24.0	11.2	14.0	9.8	15.1	11.3	.00	22.50***	.94
EMV	18.2	8.6	16.2	9.2	25.3	10.3	25.6	12.5	.28	27.10***	.51
EMI	21.1	9.4	25.3	9.6	14.9	7.99	17.3	8.8	11.86**	18.86***	.89
SDS	1.8	2.3	2.7	2.8	4.0	3.7	4.7	3.6	3.66	13.31***	.06
DEP	.4	1.4	.4	1.1	.1	.3	.2	.7	.47	2.23	.10
Blurps	5.5	5.3	3.8	2.8	6.1	4.0	4.5	3.2			

* $p < .05$
** $p < .01$
*** $p < .001$

Main effect: Differences in communication behavior for nondistressed and distressed couples

Before examining if there is an interaction between gender and distress, differences in communication behavior for distressed and nondistressed couples were examined. Nondistressed (n = 47) couples were compared with distressed (n=41) on the relative frequencies of the five communication categories during a problem solving discussion. As in the literature, the findings revealed that irrespective of gender, nondistressed couples demonstrated significantly more PSF behaviors, less PSI behaviors, more EMV, less EMI, and more SDS than distressed couples. Thus, across communication behavior categories, there were significant differences between distressed and nondistressed couples. See Table 5.2.

Interaction effects for gender and distress level

The hypothesis that relationship distress would be associated with differences in communication behavior between male and female partners was tested with ANOVA. The unit of analysis was the couple in which distress was treated as a between-subject variable and gender as a within-subject variable. Before examining sequences of behavior, frequencies were looked at. Thus for the first analyses, the dependent variables were the coded relative frequency of communication behavior. Results revealed no significant gender by distress interactions across communication behavior categories. Thus, no interaction effects between gender and distress were found for relative frequencies of communication behavior. See Table 5.2.

Sequential analyses

Next, the hypothesis that the behavior of male and female partners is interdependent in a problem-solving discussion was tested with lag-sequential analysis (Bakeman & Gottman, 1986). The conditional probability that male and female partner behaviors follow each other at one lag was calculated (see Table 5.3) as well as the Z-scores (see Table 5.4) to test the significance of the probabilities. Lag 1 was examined separately for distressed and nondistressed couples. The six summary codes for male partners were first set as the criterion and the six summary codes of the females followed and then vice versa.

Z-scores

For distressed couples in which male behavior was followed by female behavior, one sequence revealed a Z -score above 1.96: MPSF -> FEMV. The rest of the Z-scores of the *male to female* sequences of behavior for distressed couples did not reach significance level ($Z > 1.96$). Next, female partner summary codes were set as the criterion and male summary codes followed. For distressed couples in which female partner behavior was followed by male partner behavior, FPSF -> MEMV and
FDEP -> MDEP had Z-scores above 1.96. The rest of the Z-scores of the *female to male* sequences of distressed couples did not reach significance level. See Table 5.4 .

For nondistressed couples, in which male summary codes were set as the criterion and female summary codes followed, MPSF -> FEMV and MEMV -> FPSF reached significance ($Z > 1.96$). The rest of the *male to female* sequences of

Table 5.3
Probabilities of sequences in communication behaviors of distressed and nondistressed males and females (probabilities are multiplied by 100 to improve readability of the table)

		Distressed (n = 41)				Nondistressed (n = 47)			
		F->Male		M->Female		F->Male		M->Female	
		$\bar{x}$	sd	$\bar{x}$	sd	$\bar{x}$	sd	$\bar{x}$	sd
PSF	PSF	19.7	11.0	21.9	11.2	20.3	10.1	19.3	9.9
	PSI	9.0	7.0	10.0	9.0	4.4	4.1	6.5	6.5
	EMV	23.9	12.7	21.8	15.1	35.9	14.9	37.3	17.3
	EMI	13.0	8.9	15.4	9.0	11.0	8.1	11.2	6.7
	SDS	.1	.5	.4	1.0	.5	1.2	.7	1.3
	DEP	.2	.9	.0	.0	.0	.0	.1	.6
PSI	PSF	9.9	9.0	9.5	6.9	14.5	13.0	11.1	12.5
	PSI	17.0	10.2	18.1	11.2	12.6	13.6	13.5	16.0
	EMV	21.0	14.3	18.5	12.9	24.3	18.9	28.5	22.3
	EMI	20.6	15.0	23.2	12.0	15.2	12.2	18.2	15.1
	SDS	.4	1.4	.3	1.1	.7	3.0	1.0	4.2
	DEP	.0	.0	.1	.8	.0	.0	.0	.0
EMV	PSF	26.8	17.2	25.8	18.0	39.4	15.0	33.7	15.5
	PSI	15.3	14.5	13.5	11.9	10.5	10.4	11.3	12.4
	EMV	5.2	6.4	4.2	5.8	5.9	5.2	8.3	9.0
	EMI	10.6	11.0	14.3	10.8	7.8	7.8	9.3	8.9
	SDS	1.4	4.4	1.2	2.8	2.9	4.1	3.6	3.7
	DEP	.3	1.5	.3	1.6	.0	.0	.0	.3
EMI	PSF	9.6	7.8	9.0	8.4	12.4	9.8	13.3	8.5
	PSI	17.7	12.6	17.6	12.3	8.6	8.2	9.8	9.0
	EMV	15.9	11.6	13.5	12.2	21.9	14.0	23.4	14.5
	EMI	11.9	8.8	13.8	10.6	9.1	7.2	11.4	9.2
	SDS	.3	.9	.4	1.5	1.4	2.9	1.0	2.4
	DEP	.0	.0	.1	.5	.0	.0	.0	.0
SDS	PSF	3.2	8.3	2.6	11.2	5.8	10.3	4.0	7.8
	PSI	4.2	11.3	1.1	4.9	4.0	15.7	4.0	11.0
	EMV	19.1	29.2	9.6	21.3	32.5	26.6	27.6	27.6
	EMI	4.6	13.2	8.6	23.3	6.3	14.1	5.5	12.1
	SDS	.4	2.2	2.4	15.6	.6	3.0	1.8	8.1
	DEP	.0	.0	.0	.0	.0	.0	1.1	7.3
DEP	PSF	.0	.0	.7	4.3	.4	2.9	.0	.0
	PSI	.6	3.9	.0	.0	.0	.0	2.1	14.6
	EMV	5.5	22.0	4.3	17.7	4.7	20.5	2.1	14.6
	EMI	4.1	17.4	.6	3.9	3.0	15.6	.0	.0
	SDS	.0	.0	.0	.0	.0	.0	.0	.0
	DEP	1.2	7.8	.6	3.9	.0	.0	.0	.0

Table 5.4
Mean Z-scores and number of occurrences of sequences in communication behaviors of distressed and nondistressed males and females

		nondistressed (n = 47)						distressed (n = 41)					
		F -> MALE			M -> FEMALE			F -> MALE			M -> FEMALE		
		$\bar{z}$	sd	n	$\bar{z}$	sd	n	$\bar{z}$	sd	n	$\bar{z}$	sd	n
PSF	PSF	-.13	1.49	47	-.26	1.47	47	.63	1.71	41	.96	1.93	41
	PSI	-.91	.84	47	-.69	.85	47	-.91	.93	41	-.65	1.31	41
	EMV	4.55	2.32	47	4.75	2.10	47	2.84	1.81	41	2.76	2.35	41
	EMI	.55	1.21	47	.35	1.26	47	.26	1.27	41	.16	1.33	41
	SDS	-.95	.54	44	-1.01	.72	46	-.69	.50	28	-.66	.69	31
	DEP	-.54	.10	4	.01	1.18	8	-.15	.91	4	-.60	.30	9
PSI	PSF	-.56	1.16	47	-.71	.90	47	-.84	1.12	41	-.98	.80	41
	PSI	.68	1.61	47	.79	1.81	47	.47	1.41	41	.66	1.41	41
	EMV	1.49	1.70	47	1.86	1.75	47	1.90	1.53	41	1.85	1.70	41
	EMI	1.14	1.38	47	1.48	1.79	47	1.47	1.54	41	1.54	1.50	41
	SDS	-.33	1.01	44	-.39	.76	46	-.42	.56	28	-.54	.67	31
	DEP	-.25	.10	4	-.25	.13	8	-.55	.27	4	-.10	1.38	9
EMV	PSF	3.15	1.91	47	2.52	2.05	47	1.65	1.86	41	1.56	2.31	41
	PSI	.65	1.43	47	.40	1.23	47	.34	1.41	41	.06	1.22	41
	EMV	-1.60	1.04	47	-1.31	1.26	47	-.87	1.02	41	-.81	1.22	41
	EMI	-.14	1.06	47	-.11	1.22	47	.02	1.42	41	.18	1.41	41
	SDS	.19	1.05	44	.29	.98	46	.14	1.36	28	-.17	.82	31
	DEP	-.52	.28	4	-.22	.93	8	.30	.89	4	-.05	.79	9
EMI	PSF	-.86	.98	47	-.44	.99	47	-1.03	1.03	41	-.94	.96	41
	PSI	.25	1.33	47	.27	1.02	47	.71	1.56	41	.66	1.23	41
	EMV	1.28	1.47	47	1.28	1.42	47	1.00	1.64	41	.74	1.67	41
	EMI	.23	1.12	47	.29	1.28	47	-.06	1.12	41	-.11	1.20	41
	SDS	-.19	.86	44	-.45	.50	46	-.47	.58	28	-.55	.53	31
	DEP	-.30	.15	4	-.42	.29	8	-.67	.20	4	-.31	.58	9
SDS	PSF	-.73	.78	46	-.70	.53	44	-.54	.72	31	-.52	.64	28
	PSI	-.29	.72	46	-.31	.57	44	-.43	.60	31	-.46	.41	28
	EMV	1.55	1.67	46	1.11	1.44	44	.88	1.41	31	.39	1.39	28
	EMI	-.09	1.03	46	-.20	.92	44	-.29	.88	31	-.03	1.09	28
	SDS	-.30	.38	43	-.11	1.18	43	.06	1.52	23	.06	1.53	23
	DEP	-.17	.10	4	1.51	4.68	7	-.27	.08	4	-.30	.17	5
DEP	PSF	-.42	.31	8	-.50	.08	4	-.56	.28	9	-.29	.80	4
	PSI	-.25	.13	8	1.76	4.05	4	-.34	.35	9	-.53	.25	4
	EMV	.34	1.23	8	.24	1.46	4	.51	1.49	9	1.85	1.99	4
	EMI	.25	1.04	8	-.29	.14	4	.22	1.12	9	-.27	.63	4
	SDS	-.23	.20	7	-.16	.10	4	-.29	.17	5	-.27	.09	4
	DEP	-.10	.	1	-.10	.	1	3.74	5.38	2	1.79	2.62	2

nondistressed couples did not reach significance level. For sequences with the behavior of the female partner as the criterion followed by the behavior of the male partner, FPSF -> MEMV and FEMV -> MPSF revealed a Z-score greater than 1.96. The rest of the *female to male* sequences of nondistressed couples did not reach significance level. See Table 5.4.

ANOVA's

Next, ANOVA's were conducted, with the mean Z-scores of lag 1 sequences as the dependent variables. Distress was treated as a between-subject variable and gender as a within-subject variable. Results are presented in Table 5.5.

Table 5.5
Results of the analysis of variance of Z-scores for lag 1 (N = 88)

		F (1,86) gender initiator	of distress	interaction
PSF	PSF	.47	9.55**	2.47
	PSI	.02	2.79	.03
	EMV	.07	21.05***	.37
	EMI	.71	1.42	.07
	SDS	.27	4.09*	.07
	DEP	n.a.	n.a.	n.a.
PSI	PSF	1.79	2.22	.00
	PSI	.65	.36	.04
	EMV	.70	.44	1.16
	EMI	.96	.55	.41
	SDS	.42	1.17	.18
	DEP	n.a.	n.a.	n.a.
EMV	PSF	2.90	10.51**	1.68
	PSI	2.27	2.20	.01
	EMV	2.49	8.12**	.97
	EMI	.25	1.39	.10
	SDS	.64	1.41	.99
	DEP	n.a.	n.a.	n.a.
EMI	PSF	3.24	4.57*	1.34
	PSI	.01	4.16*	.03
	EMV	.30	3.29	.31
	EMI	.00	3.17	.10
	SDS	2.27	1.90	.28
	DEP	n.a.	n.a.	n.a.
SDS	PSF	.02	2.70	.06
	PSI	.03	4.96*	.43
	EMV	2.17	6.23*	.00
	EMI	.08	.07	.73
	SDS	.60	.94	.59
	DEP	n.a.	n.a.	n.a.

*p<.05 **p<.01 ***p<.001

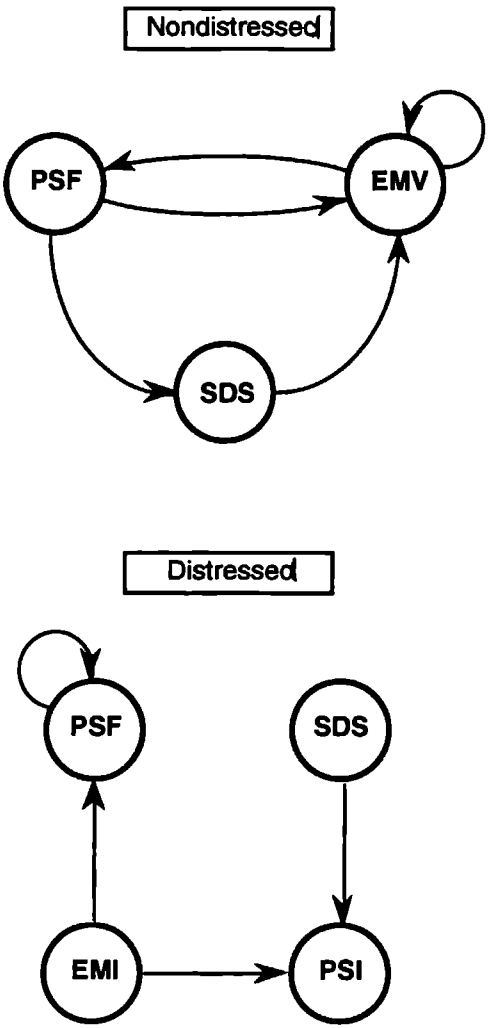

Figure 5.1 Typical patterns of communication of nondistressed and distressed couples

The following sequences significantly discriminated *nondistressed* couples from distressed. Five sequences, which appear to reflect positive reciprocity and validation, characterized nondistressed couples: PSF -> EMV, PSF -> SDS, EMV -> PSF, EMV -> EMV, and SDS -> EMV. Nondistressed couples interactions were thus characterized by problem solving followed by self disclosure and emotional validation, and in turn emotional validation followed by emotional validation or problem solving facilitation. In contrast, the following four behavior sequences discriminated *distressed* couples: EMI -> PSI , EMI -> PSF, SDS -> PSI, and PSF -> PSF. Distressed interactions were characterized by (1) emotional invalidation followed by problem solving inhibiting or problem solving facilitating, (2) self disclosure followed by problem solving inhibiting and lastly, (3) problem solving loops. The patterns of the nondistressed and distressed couples are visually displayed in Figure 5.1. The rest of the lag 1 sequences did not discriminate distressed from nondistressed couples. Furthermore, there were no significant gender differences in communication sequences, nor interaction effects between gender and distress level.

Self-report of stress level

It is feasible that the level of stress experienced in relation to the interaction task obscures the predicted interaction effect between gender and relationship distress. More specifically, those couples that report experiencing a low level of stress, may not demonstrate the predicted gender x distress interaction. Whereas, couples who report experiencing a high level of stress, may be more likely to demonstrate more pronounced gender differences when relationshiply distressed. To test this possibility, an additional factor was added to the analysis of variance: self report of stress associated with the task, assessed immediately following the interaction.

For the analysis of variance, the addition of stress level resulted in a 2x2x2 factorial design with one within subjects variable (gender) and two between subjects factors (relationship happiness and stress level). Given that stress level and relationship happiness correlated, cells in the design were not evenly filled. As seen in Table 5.6, none of the three way interactions for the communication frequency data were significant. In conclusion, stress level during the task did not have an effect on the hypothesized interaction between gender and relationship distress.

Table 5.6
Means, SD's and F-values for for relationship distress, stress level, and gender on four types of communicative behavior

	males				females				F values three way interaction
	ND stress		DD stress		ND stress		DD stress		
	low	high	low	high	low	high	low	high	SLxGxMD
PSF	36.9 (11.2)	32.3 (9.7)	36.0 (10.3)	24.7 (9.2)	33.6 (11.2)	30.0 (11.2)	29.9 (8.7)	26.6 (8.9)	2.65
PSI	13.1 (9.9)	16.5 (9.3)	15.7 (8.7)	28.9 (11.0)	15.4 (12.0)	14.2 (9.9)	16.3 (9.5)	27.2 (10.3)	0.23
EMV	26.2 (9.6)	22.9 (12.2)	22.7 (7.9)	16.3 (8.3)	25.3 (13.3)	26.4 (10.6)	22.3 (10.2)	13.7 (7.5)	0.93
EMI	13.5 (6.4)	18.6 (10.1)	18.1 (9.2)	22.3 (9.3)	16.5 (9.3)	19.4 (7.1)	22.5 (8.9)	26.5 (9.8)	0.23

DISCUSSION AND CONCLUSION

Consistent with the literature, a significant difference was found in relative frequencies across all communication behavior categories between distressed and nondistressed couples. No significant gender differences in communication behavior for PSF, PSI, EMV or SDS were found. However, a significant gender difference in EMI was found, with women demonstrating more emotional invalidation than males. No interaction effects (gender x distress) were found for any of the communication behavior categories. Thus, the prediction that distress level would augment gender differences was not supported by the frequency data. Further, the prediction that males would demonstrate more problem solving behavior than females was not supported. As predicted, women did demonstrate more emotional behavior, but only more negative emotional behavior, not more positive emotional behavior than males. Female partners of distressed couples did this significantly more often than the female partners in nondistressed relationships, but there was no interaction effect between distress and gender. In sum, the prediction that females would overall use more emotional communication behavior was only partially supported. The prediction that males would demonstrate more problem solving was not supported. Finally, that gender differences would be more pronounced in distressed couples, was not at all supported with the frequency analysis. Note, the stress level associated with the task (which was reported immediately after the task) was examined and was not found to be

associated with the hypothesized interaction between gender and relationship distress.

Next, sequences that discriminate distressed from nondistressed couples were examined. Five sequences reflecting positive reciprocity and validation characterized the problem solving discussion of *nondistressed* couples. Problem solving appears facilitated for nondistressed couples by emotional validation and self disclosure. In contrast, four different sequences characterized the *distressed* couples conversations. In the interactions of distressed couples it appears that couples remain in the problem solving phase without making progress perhaps due to the lack of positive emotional validation and self disclosure loops like those found among nondistressed couples. When distressed partners did display self disclosure it was followed by problem solving inhibiting.

There were no significant gender differences in communication sequences nor interaction effects between gender and distress level. Thus, again the prediction that distress level would augment gender differences found in interaction sequences, was not supported by the data. In sum, emotional invalidation is the only communication behavior in which a gender difference was found, with women showing higher rates than males. This finding is consistent with several other studies (e.g., Notarius & Johnson, 1982; Schaap, 1982). However, upon examination of interaction sequences, there were no patterns that were significantly gender-linked. Furthermore, a gender by distress effect was not found. Thus, even when a gender difference was found in behavior (i. e., female partners demonstrating more emotional invalidation), it was not significantly linked to a negative escalation.

In the present study, patterns of communication of distressed and nondistressed couples were found to significantly differ from one another. These differences were not related to gender per se. That is, it did not matter whether the male or female partner demonstrated certain behaviors, but rather whether or not they occurred. The hypothesized gender differences and pattern described in the popular, clinical and research literature of female demand and male withdrawal were not confirmed. A demand-withdrawal pattern, where EMI lead to PSI, was found to characterize distressed couples and not nondistressed, and was not found to be gender-linked.

The present study adds to the cumulative set of studies on gender, distress and communication in relationships. The findings suggest that it is perhaps not important whether males or females demonstrate certain behaviors, but rather

whether or not one behavior leads to another. For example, in the present study women were found to demonstrate more emotional invalidation (e.g., criticism, blame) than male partners. However, when examining the sequences of behavior in distressed and nondistressed couples, emotional invalidation did not lead to other behaviors in nondistressed couples interactions, whereas it did in distressed couples interactions (regardless of gender).

Power analyses revealed that the sample was adequate to detect large main effects and interaction effects of gender and distress, but insufficient to detect small or medium effects. However, compared to sample sizes in the literature on observational studies of couples, the current sample size is very large, making this study unique to test the hypotheses.

A central feature of the present study is that it was conducted in the Netherlands. The study thus offers a cross-cultural observational data set, contributing to the cross-cultural validation of COMFI as a coding system as well as the testing of several hypotheses. Analyses revealed that COMFI was able to significantly discriminate distressed from nondistressed couples with coders blind to the status of the couples.

Though the sample size was adequate, the Dutch sample may not generalize to American couples. Dutch couples may be less gender-stereotypical in behavior than American couples. So the sample participants in the present study may have been more more androgynous in their relationship behavior than American couples, in general. This is an important consideration for future studies on gender and speaks to the need for also including a self-report measure of masculinity and femininity (see Sayers & Baucom, 1991).

Another consideration for generalizing the findings is the setting of the present investigation: the research lab. In the literature it is stated that 20 minutes is long enough to sample an interaction adequately (Gottman & Krokoff, 1989). Having a problem discussion at home is found to be similar to having one in the lab, though Gottman (1979) reports that the behavior of couples in a naturalistic setting at home is somewhat more extreme than in the laboratory setting. Schaap (1982) comments that this means if one finds significant differences in communication behavior in the lab between distressed and nondistressed couples (as numerous studies such as the present one have), that one can assume that these will be even more extreme at home. Therefore, it can be concluded that the research lab is a good method for studying problem-solving discussions.

Studying problem discussions, however, does not give information about the natural course leading up to an interaction around a certain topic, which may have a longer build up over time and be influenced by various circumstances (presence of children or others; time of day) or settings (in the car or in the bedroom). Thus, for future research other methods of studying conflict (e.g., with the use of the *Conflict Interaction Record* by Schaap, 1990) may offer additional information about how gender differences may reveal themselves in dealing with problems and conflicts. Findings from the present study do not support the notion that gender differences in communication during a problem-solving discussion are related to distress, future studies could further investigate if other gender related patterns of behavior are (e.g., male partners withdrawing behind their newspaper).

Longitudinal data may also assist in better understanding the findings of the present study. For example, the negativity found in the present study for wives is consistent with a number of other studies (e.g., Notarius & Johnson, 1982; Schaap, 1982). Baucom et al. (1990) suggest that it would be useful to examine what the consequences are for women pushing for engagement in the early stages of a relationship. They refer to a social learning model, and suggest that if the couple is lacking skills and the wife is pushing for engagement, that her efforts will result in increased discord, which will in turn result in the husbands withdrawal. The wife will then experience the husbands withdrawal as an additional problem with the relationship. This pattern will lead to increased distress, frustration, unresolved problems, and failed attempts at harmony. In the present study, couples were in different stages of their relationship. Following such couples over time may offer information on how patterns unravel themselves. As the present sample will be followed over time, this question may be looked at a later date.

In sum, though there are limitations to generalizability given the sample and setting, the study offers a large cross cultural dataset on observations of couples. The study further disconfirms currently held beliefs about gender-linked behavior in communication.

The findings of the present study have clinical implications as well. It is difficult to change gender or gender related behavior, whereas the interactional behaviors found to characterize distressed couples are patterns that can be altered. The nondistressed couples in the present sample, used emotional validation and self disclosure while problem solving. The use of such effective

communication skills can also be taught to distressed couples. A focus on *what* is happening (rather than *who* is doing it) is a more optimistic and less blaming approach for couples and is in contrast to what is advocated in the popular literature of 'women are this way' or 'men are that way'. It is also more in accord with the data. Partners, male and female, can be taught how their own speaking or listening 'skills' elicits their partners 'skills' and how their partner's behavior in turn elicits their own, without being a vicitm of their gender.

Chapter 6

The Marital Agendas Protocol: A study on the reliability and validity of a relational efficacy measure with a Dutch sample

This chapter describes a self-report measure of relational efficacy, the Marital Agendas Protocol (MAP; Notarius & Vanzetti, 1983). Data was collected on a Dutch sample of 89 couples, offering information on the cross cultural psychometric and validity features of the MAP. The validity of the measure was supported by the finding that distressed couples reported overall significantly lower relational efficacy compared to nondistressed couples. Distress appeared to be a more important factor related to relational efficacy than gender. No significant differences were found between males and females on relational efficacy. In conclusion, the MAP proves to be a reliable, valid and useful instrument to use with Dutch couples for both research and clinical purposes.

INTRODUCTION

Relational efficacy (RE) is an individual partner's generalized expectancy regarding their capacity as a couple to successfully resolve relationship issues (Doherty, 1981a, 1981b; Notarius & Vanzetti, 1983; Weiss, 1980). Derived from Bandura's (1977) concept of self-efficacy, relational efficacy is the translation of the individually oriented construct of self-efficacy to a construct focused on the functioning of a couple's relationship: What are *we* capable of doing about x in situation y? RE has been hypothesized to be an important mediating factor between cognitions and behaviors in relational problem solving. The MAP is an assessment tool developed by Notarius and Vanzetti (1983) to measure RE.

The MAP has proven to be a reliable and valid instrument in a series of studies conducted in the United States. Test-retest reliability on the MAP over a period of one to three weeks is .81 (Notarius & Vanzetti, 1982). Two criterion validity studies (Notarius & Vanzetti, 1983) showed moderate correlation's with the Locke Wallace Marital Adjustment Test (Locke & Wallace, 1959) (average $r = .57$) and with the Spouse Observation Checklist (Wills, Weiss, & Patterson, 1974) perceptions of displeases (for husbands $r = .43$; for wives $r = .36$) and with wives' perceptions of pleases ($r = .32$). In addition, scores on the MAP also correlated with wives' scores ($r = .41$) on Navran's (1967) Primary Communication Inventory (Meeks, Arnkoff, Glass, & Notarius, 1986) and was not related to social desirability (Notarius & Vanzetti, 1983). In an observational study, evidence was found for relational efficacy to be related to observed problem-solving behaviors (coded with COMFI; Notarius, Pellegrini, & Martin, 1990) during marital interaction discussions (Irwin, 1991). Lastly, relational efficacy, as measured by the MAP, has also been shown to have predictive value in couple's adjustment to parenthood (Benson, 1988).

The present study adds to this body of literature by providing cross-cultural data on the reliability and validity of the MAP. The psychometric properties of the MAP are investigated by inspection of descriptive statistics of the items that compose the subscales for problem intensity and relational efficacy. Reliability in terms of internal consistency is assessed by calculating item-rest correlations and Cronbach's a for the subscales. The construct validity of the MAP is investigated by comparing the scores of subgroups of subjects, i.e., distressed and

nondistressed couples. Finally, the relationship between relational efficacy, gender and relationship distress is examined.

METHOD

Subjects

Data of 89 Dutch couples were used for the current investigation. Both distressed and nondistressed couples were included. No significant differences were found between the distressed and nondistressed couples in marital status, education, religion, age, or number of years married (all $p > .20$). The only difference found between both groups was that significantly more distressed couples had children (55%) than nondistressed couples (30%) $C^2 (1) = 5.70$; $p = .017$. See Table 6.1 for an overview of demographic data.

Table 6.1
Demographic characteristics of the total sample and the nondistressed and distressed couples separately

	total sample (N= 89)		nondistressed (n = 47)		distressed (n = 42)	
children (n, %)	37 (42%)		14 (30%)		23 (55%)	
marital status (%)	51		49		52	
married	33		34		31	
cohabiting	17		17		17	
LAT						
nr of yrs together ($\bar{x}$, sd)	8.0 (8.0)		6.9 (6.7)		10.0 (8.2)	
	males	females	males	females	males	females
age (years)	37.0(10.0)	34.0 (9.0)	36.2(10.4)	32.5 (8.0)	38.7 (8.9)	36.0 (8.9)
religion (%) Ctholic	39	42	43	40	36	43
Protestant	6	5	6	9	5	0
other	4	7	6	4	2	10
none	51	47	45	47	57	48
% university education	26	19	26	23	26	14

Recruitment strategy and selection criteria

Couples were recruited over a two year period primarily by popular media, including newspaper articles, advertisements and radio interviews, as well as distribution of posters and pamphlets. Couples responded to advertisements soliciting couples for a research study on relationship development and

communication. The criterion for participating in the study was a committed relationship of at least one year with plans for a future together. Both partners were required to participate.

Procedure

Couples participated in a larger assessment which entailed being videotaped during a problem solving discussion and filling out an extensive battery of questionnaires about risk indicators and factors related to relationship functioning as part of a larger study. Each partner completed an informed consent form. After the assessment, participants were given a popular Dutch book by the second author on relationships in appreciation of their participation.

Measures

Marital Agendas Protocol (MAP; Notarius & Vanzetti, 1983). This instrument assesses relational efficacy, as well as problem intensity. The MAP indexes the expectancy of communication success, in other words, the partners confidence in the couple's ability to resolve problems. Ten relationship problem areas are presented in four questions. In one of the questions, relational efficacy is assessed by asking partners to rate how many out of ten discussions about a problem does he or she believe will be resolved to their mutual satisfaction. The measure was translated for use in this study (Van Widenfelt & Schaap, 1990). We added two relationship problem areas to the original ten areas in the American scale relevant for the Dutch couple population: (1) role division and work and (2) women's rights / emanicipation.

Personal History Questionnaire (PHQ; Van Widenfelt, Schaap, & Verdellen, 1990). The PHQ was constructed for the present study to gather relevant background information. This form covers demographic and background information about the subject including age, education, and religion as well as information about the relationship.

Maudsley Marital Questionnaire (MMQ; Cobb, McDonald, Marks, & Stern, 1980). The MMQ is a 20 item self-report measure of marital satisfaction. Each item comprises a response range from 0-8. The measure is made up of three subscales of which for the present purposes the relationship satisfaction (10 items) subscale was used. The measure was translated and validated for the Dutch population (Arrindell, Boelens, & Lambert, 1983; Arrindell, Emmelkamp, & Bast, 1983; Arrindell & Schaap, 1985) and found to have high internal

consistency, and sufficient test-retest reliability and validity. For the present study, the relationship satisfaction subscale was used for which Chronbach's alphas were obtained for males, a = .93 as well as for females, a = .93 (N=89).

Based on summed partner scores on the Dutch version of the MMQ (Arrindell et al., 1983) marital satisfaction subscale, couples were classified as nondistressed (couple sum score 0-40) and distressed. The distressed group consisted of mildly distressed (couple sum score of 41-70) to severely distressed (couple sum score above 70 and/or score difference greater than 15 and/or request for marital therapy). For the purposes of the analyses, mild and severely distressed couples were combined to form one category: distressed, resulting in 53% nondistressed and 48% distressed couples. The two groups scored significantly different on the MMQ relationship satisfaction subscale for which nondistressed couples had a mean sum score of 17.5 (SD = 10.2) and the distressed couples had a mean sum score of 63.9 (SD = 20.6) ($t = -13.22$, $p < .001$). There were no significant differences between males and females on reports of relationship satisfaction.

RESULTS

Descriptive statistics of the items

The scores on the items of the problem intensity and the relational efficacy subscales were inspected, separately for males and females. Table 6.2 presents the results of the problem intensity subscale. For each item the mean score, standard deviation, skewness, kurtosis, and the correlation of the item with the remainder of the subscale were calculated. The latter reflects the degree to which the item "belongs" to the scale. The critical limit for kurtosis at $p = .001$ with $N = 89$ is 1.56. The critical limit for skewness at $p = .01$ with $N = 89$ is .77.

Three items were found to have exceptional kurtosis values for both male and female scores: 'religion', 'alcohol and drugs', and 'women's rights'. In addition, for males the frequency distribution of scores on 'children' and for women on 'friends' are somewhat peaked. Combined with the low mean score on these items this information indicates that these problem areas are less relevant for most couples. Most items appear to be somewhat positively skewed: respondents tend to respond on the lower end of the scale. Inspection of the

item-rest correlations indicates that most items correlate sufficiently with the rest. Exceptions are 'alcohol/drugs' for males and 'religion' for females.

In Table 6.3 descriptive statistics are presented for the relational efficacy subscale. For skewness and kurtosis, the same critical values apply as for Table 6.2. Again, 'religion' is an item that yields an extemely peaked distribution. Other areas with some kurtosis are for males 'money', 'alcohol/drugs' and 'women's rights' and for females 'friends' and 'women's rights'. Most items are negatively skewed, indicating that respondents tend to rate their efficacy on the high end of the scales. Taken together the results indicate that respondents rate their ability to solve problems concerning 'religion' and 'women's rights' as high, a finding that corresponds with their rating of the intensity or relevance of these problem areas for their relationship. Finally, item-rest correlations are satisfactory.

Table 6.2
Descriptive statistics of items of the Problem Intensity subscale of the MAP

Males Item	mean	sd	kurtosis	skewness	r_{it}
money	24.04	27.77	1.27	1.45	.25
children	16.76	22.69	2.79	1.75	.33
communication	31.92	29.21	-1.07	.58	.68
role division	26.47	28.36	.67	1.24	.60
friends	18.37	18.81	1.72	1.36	.48
sex	30.80	29.84	-.25	.90	.29
jealousy	16.31	22.65	1.93	1.60	.36
religion	4.84	14.63	15.69	3.91	.28
recreation	23.35	23.69	.91	1.23	.60
in-laws	22.34	28.61	.88	1.41	.31
alcohol/drugs	12.59	19.85	4.57	2.07	.21
women's rights	6.38	12.61	7.20	2.61	.37
Females					
money	23.37	27.67	1.51	1.46	.57
children	18.28	24.63	1.80	1.52	.28
communication	33.60	34.48	-.91	.71	.55
role division	24.46	27.14	.73	1.24	.52
friends	13.37	21.97	4.43	2.08	.64
sex	32.75	31.23	-.74	.76	.46
jealousy	21.57	28.43	.16	1.14	.33
religion	4.57	15.91	24.05	4.72	.14
recreation	23.09	24.28	.61	1.11	.74
in-laws	21.33	26.96	1.86	1.61	.36
alcohol/drugs	12.58	21.44	4.32	2.13	.29
women's rights	8.33	16.83	10.54	2.86	.59

Next, reliability in terms of internal consistency was assessed. The measure was found to be reliable in the present study: Chronbach's alphas for relational efficacy were a = .82 and a = .81 for males and females respectively and for problem intensity a = .75 and a = .80 for males and females respectively (N= 89).

Rank ordering of problem intensity and relational efficacy

by gender and by distress

Problem areas were rank ordered, first for the sample as a whole, males and females separately. Top problem areas for males were (1) communication, (2) sex and (3) role division; top three problem areas for females were: (1) communication, (2) sex and (3) money.

For the entire sample, males reported highest relational efficacy in low problem intensity areas and lowest in high problem intensity areas: 'communication', 'sex' and 'jealousy'; females also reported highest relational efficacy in problem areas of lowest problem intensity and lowest relational efficacy in the areas of 'sex', 'communication' and 'jealousy'. See Table 6.4.

Table 6.3
Descriptive statistics of items of the Relational Efficacy subscale of the MAP

Males	Mean	sd	kurtosis	skewness	r_{it}
money	7.94	2.42	1.97	-1.47	.40
children	7.63	2.85	.75	-1.30	.58
communication	6.59	2.74	-.95	-.41	.55
role division	7.42	2.38	-.56	-.63	.58
friends	8.06	1.98	.54	-1.12	.62
sex	7.06	2.82	-.58	-.79	.34
jealousy	7.31	3.09	-.32	-.98	.38
religion	8.71	2.52	3.20	-2.08	.38
recreation	7.44	2.24	.26	-.82	.55
in-laws	7.47	2.72	.68	-1.16	.62
alcohol/drugs	8.52	2.24	3.24	-1.84	.26
women's rights	8.71	2.21	5.11	-2.22	.50
Females					
money	7.67	2.84	.64	-1.25	.49
children	7.77	2.87	.76	-1.31	.25
communication	6.88	3.01	-.66	-.69	.50
role division	7.65	2.52	-.10	-.98	.61
friends	8.25	2.25	3.72	-1.89	.55
sex	6.56	3.18	-.73	-.66	.32
jealousy	7.38	3.33	-.08	-1.16	.26
religion	9.07	2.40	9.58	-3.21	.52
recreation	7.55	2.48	-.28	-.77	.59
in-laws	7.71	2.71	.95	-1.28	.47
alcohol/drugs	7.88	3.03	.53	-1.35	.44
women's rights	8.73	2.52	4.80	-2.38	.66

Table 6.4
Ranking of problem intensity and relational efficacy for males and females (N=89)

	Q 1a. Problem Intensity		Q 2. Relational efficacy	
	males	females	males	females
1. money	8	3	5	8
2. children	8	8	6	5
3. communication	1	1	12	11
4. role division	3	4	9	7
5. friends	7	10	4	3
6. sex	2	2	11	12
7. jealousy	9	6	10	10
8. religion	12	12	2	1
9. recreation	5	5	8	9
10. in-laws	6	7	7	6
11. alcohol/drugs	10	9	3	4
12. women's rights	11	11	1	2

Next, problem areas were ranked for distressed males and females versus nondistressed. Distressed males top three problem areas were: (1) communication, (2) sex, (3) role division; nondistressed males top three problem areas were: (1) money, (2) sex and (3) role division. Distressed females top three problem areas were (1) communication, (2) sex, and (3) role division; nondistressed females top three problem areas were: (1) in-laws, (2) sex and (3) role division. Thus, only the number one problem areas were different for distressed and nondistressed male and female partners. Communication was the number one problem area for distressed male and female partners.

T-tests: problem intensity, distress and gender

T-tests were conducted to test for differences in problem intensity between males and females. No significant differences between males and females on reports of problem intensity for specific problem areas were found. Next, t-tests were conducted to test for differences in overall problem intensity between distressed and nondistressed couples. There was a significant difference in problem intensity reported by the two groups: nondistressed couples had a mean sum score of 308.8 (SD = 201.2) and distressed couples 654.5 (SD = 279.0), $t = -6.63$, $p < .001$.

Next, problem intensity for specific problem areas was examined for distressed versus nondistressed couples using t-tests (see Table 6.5). Distressed male partners reported significantly higher problem intensity in the categories,

'communication', 'role division','friends', 'sex' and 'recreation'. Distressed female partners reported significantly higher problem intensity: 'money', 'communication', 'role division', 'friends', 'sex', 'recreation', 'alcohol/drugs' and "women's rights'.

Table 6.5
Means and SD's of problem intensity of distressed and nondistressed males and females (N=89)

Problem area	Males					Females				
	Nondistressed		Distressed		sign.	Nondistressed		Distressed		sign.
	$\bar{x}$,	(sd)	$\bar{x}$,	(sd)		$\bar{x}$,	(sd)	$\bar{x}$,	(sd)	
1. money	19.8	(24.2)	28.8	(30.9)		15.9	(21.4)	31.8	(31.5)	**
2. children	13.6	(18.1)	20.2	(26.6)		13.4	(20.2)	23.8	(28.0)	
3. communication	11.3	(13.9)	55.0	(24.1)	***	10.1	(14.4)	59.9	(31.3)	***
4. role division	17.7	(23.1)	36.4	(30.7)	**	17.5	(21.6)	32.1	(30.7)	*
5. friends	13.5	(15.2)	23.8	(21.0)	*	7.3	(15.1)	20.1	(26.3)	**
6. sex	17.8	(20.2)	45.0	(32.4)	***	18.7	(24.1)	48.5	(31.0)	***
7. jealousy	12.2	(16.2)	21.0	(27.8)		16.8	(24.0)	26.9	(32.1)	
8. religion	4.2	(12.2)	5.6	(17.0)		4.1	(14.5)	5.0	(17.6)	
9. recreation	16.2	(18.9)	31.2	(26.0)	**	14.4	(18.1)	32.9	(26.7)	***
10. in-laws	18.4	(25.5)	26.7	(31.4)		18.8	(25.5)	24.1	(28.6)	
11. alcohol/drugs	10.4	(17.7)	15.0	(21.9)		7.6	(14.4)	18.2	(26.3)	*
12. women's rights	4.8	(9.5)	8.2	(5.3)		3.6	(7.8)	13.5	(22.0)	*

* $p < .05$ ** $p < .01$ *** $p < .001$

T-tests: Relational efficacy, distress and gender

There was a significant difference in the scores on overall relational efficacy between distressed and nondistressed couples: nondistressed couples had a mean sum score across the twelve categories of 206.5 (SD = 18.2) and distressed couples had a mean sum score of 163.5 (SD = 29.4), $t = 8.18$, $p < .001$. Next, gender was examined and no significant differences between males and females on reports of relational efficacy for specific problem areas were found.

In terms of relational efficacy on specific problem areas, nondistressed males reported significantly higher relational efficacy than distressed males in all categories except jealousy, religion, in-laws, drugs/alcohol and women's rights. For females, nondistressed females reported significantly higher relational efficacy across all categories except religion. See Table 6.6.

Table 6.6
Means and SD's of relational efficacy of distressed and nondistressed males and females (N=89)

Problem area	Males					Females				
	Nondistressed		Distressed		sign.	Nondistressed		Distressed		sign.
	$\bar{x}$,	(sd)	$\bar{x}$,	(sd)		$\bar{x}$,	(sd)	$\bar{x}$,	(sd)	
1. money	8.6	(2.1)	7.2	(2.6)	**	8.5	(2.5)	6.8	(2.9)	**
2. children	8.5	(1.9)	6.7	(3.3)	**	8.4	(2.7)	7.1	(3.0)	*
3. communication	8.4	(1.7)	4.6	(2.3)	***	9.1	(1.2)	4.4	(2.4)	***
4. role division	8.2	(2.0)	6.5	(2.5)	**	9.0	(1.3)	6.2	(2.8)	***
5. friends	8.6	(1.5)	7.5	(2.3)	*	9.0	(1.2)	7.4	(2.8)	**
6. sex	8.0	(2.4)	6.0	(2.9)	**	8.0	(2.2)	4.9	(3.3)	***
7. jealousy	7.7	(2.9)	6.9	(3.3)		8.1	(2.8)	6.5	(3.7)	*
8. religion	9.1	(2.0)	8.3	(3.0)		9.4	(1.7)	8.7	(13.0)	
9. recreation	8.2	(2.0)	6.6	(2.3)	**	8.6	(1.6)	6.4	(2.8)	***
10. in-laws	7.9	(2.4)	7.0	(3.0)		8.5	(2.1)	6.9	(3.1)	**
11. alcohol/drugs	9.0	(1.9)	8.0	(2.5)		8.7	(2.3)	6.9	(3.5)	**
12. women's rights	9.1	(1.6)	8.2	(5.3)		9.6	(1.0)	7.8	(3.3)	**

*p<.05
**p<.01
***p<.001

ANOVA: Gender, distress and relational efficacy

An ANOVA was conducted with gender as a within subjects variable, distress as a between subjects variable and relational efficacy as the dependent variable. In accordance with prior findings, the analysis revealed a main effect for distress [$F(1,87)=70.43$, $p < .001$], and no main effect for gender. Interestingly, an almost significant [$F(2, 87)=3.96$, $p = .05$)] interaction effect for gender and distress emerged. The interaction effect suggests that females report of relational efficacy is more associated with marital distress than men's. That is, distressed women reported much lower relational efficacy than nondistressed women, non- and distressed males.

DISCUSSION AND CONCLUSION

The present report focuses on the psychometric properties of two subscales of the MAP: Problems intensity and relational efficacy. Descriptive statistics reveal that respondents tend to score on the low end of the scale when rating the intensity of most problem areas. The general skewness "towards health" might reflect the fact that the current sample was predominantly healthy. Extremely skewed scores were found on the 'religion' and 'women's rights' items. The same items yielded skewed scores on the relational efficacy subscales. Subjects rated their relationship as quite efficacious in solving issues in these two areas.

The extreme scores on 'religion' and 'women's rights' might reflect cultural peculiarities of the Netherlands. Recent reseach shows that the Netherlands has extremely low rates of religiousity compared to other countries. Furthermore, the Netherlands are generally viewed as a forerunner in the women's liberation movement. Therefore, these two areas may not be areas that Dutch couples tend to experience as difficult. Setting aside these potential problems in the frequency distribution of individual items, the subscales as a whole appeared to be reliable. The reliability of the subscales (item-rest correlations and internal consistency) were satisfactory.

The top problem areas reported by males were (1) communication, (2) sex and (3) role division; whereas for females the top three problem areas were: (1) communication, (2) sex and (3) money. Interestingly, when problem areas were rank ordered based on level of relationship distress, the ranking looks different: For distressed males the top three problem areas were the same as for the entire male sample. However, nondistressed males ranking was different: (1) money, (2) sex and (3) role division. Distressed females top three problem areas were quite similar to the entire sample: (1) communication, (2) sex, and (3) role division; whereas for nondistressed females the top three problem areas were: (1) in-laws, (2) sex and (3) role division. For happy couples, money and in-laws take precedence over communication. As long as couples are fighting over money and in-laws, their ratings of relationship satisfaction are quite high. However, when couples are arguing about arguing itself (i. e., communication), then their ratings of relationship satisfaction are quite low, and there is reason for concern about their marital health.

In general, distressed partners experienced their problems as significantly more intense than nondistressed partners. There were no gender differences, however, on reports of intensity of problems. Reported relational efficacy was consistent with ratings of problem intensity. That is, relationship distress was associated with lower relational efficacy for both males and females. A marginally significant interaction effect suggests that females report of relational efficacy is more associated with relationship distress than men's. That is, distressed women reported much lower relational efficacy than nondistressed women, non- and distressed males. This may be reflective of the commonly held notion among marital researchers, that women are the "barometer" or the relationship, and thus are better at gauging and reporting the relationship's current "pressure".

In conclusion, the present data support the reliability and validity of the Dutch version of the MAP. Interestingly, the data reveal that distress appears a more prominent factor than gender in determining couple's experience of problem intensity and their sense of relational efficacy. Distressed partners appear to have a lower sense of efficacy in working out their problems. Fighting about how to fight and having a sense of not being able to resolve conflicts as a couple are both found to be linked to having a distressed relationship. This tool has been found to be useful in clinical interventions with couples to get a sense of their problem areas and their experience of efficacy as it changes over the course of an intervention. Further, it has discriminatory power to identify distressed and nondistressed couples.

PART III

RISK AND PREVENTION

Chapter 7

Is parental divorce related to current relationship functioning in adults?

The present study investigates the association between parental divorce and current relationship functioning in couples. Sixty-seven non- to mildly distressed Dutch couples filled in a set of questionnaires and were videotaped during a problem solving discussion, which was coded with a microanalytic coding system. It was hypothesized that couples in which one partner has divorced parents would demonstrate more negative evaluations of their relationship and display more negative communication behavior. The hypotheses were not confirmed, in fact, couples with a parental divorce background were more positive about their relationship and demonstrated more problem solving facilitation during a problem solving task than couples from intact families of origin. Findings are discussed in light of the growing literature on adult children of divorce and characteristics of the present sample.

Van Widenfelt, B., Schaap, C., Hosman, C., & van der Staak, C. (submitted). Is parental divorce related to current relationship functioning in adults?

INTRODUCTION

The current divorce rate in the Netherlands is 30% of all marriages (Centraal Bureau voor Statistiek, 1988). In the United States, the rate is even higher, as almost 50% of all marriages end in divorce (National Center for Health Statistics, 1990). These high rates are of concern due to the serious psychological, physical and economical consequences of marital distress and divorce on partners and offspring (e.g., Bloom, Asher, & White, 1978; Burman & Margolin, 1992; Emery, 1982). Furthermore, studies have indicated that divorce is often recurrent within families. That is, persons from divorced families are more likely to divorce or separate from their partners than persons from intact families (De Graaf, 1991; Glenn & Kramer, 1987; Kooy, 1984; Mueller & Pope, 1977).

The analysis of sixteen national surveys in the US, conducted between 1962 to 1985, reflect not only higher rates of transmission of divorce in offspring of divorced couples, but also a different effect for men and women; men were found to have a five to 12 percent higher rate of divorce and women a 12 to 19 percent higher rate than that of persons from intact families (Glenn & Kramer, 1987; Pope & Mueller, 1976). In a recent study on 6,000 Dutch women, De Graaf (1991) reports that women from divorced families are twice as likely to end their relationships than women from intact families. It has also been reported that these women leave their parental home at a younger age, choose more frequently cohabitation before marriage, have fewer children and are more negative about their current relationship with their partner than women from intact families.

In addition to large survey studies, numerous studies on the effects of parental divorce have been conducted on both clinic and normal samples. Amato and Keith (1991) concluded in a meta-analysis (37 studies, N = 81,000) on the effects of parental divorce (PD) on adults, that adults of PD exhibit lower psychological well being, make more use of mental health services, report lower marital quality, are more likely to be a single parent (especially males) and are more likely to separate or to divorce (especially females) than adults from intact families (IF). They present several qualifications to these findings, however. First of all, the effect sizes are not that large. This is not surprising as it is well known that parental divorce is not a unitary experience for offspring; other factors, such as the amount of parental conflict present, may also be important in

understanding the effect of a divorce on offspring. Additionally, there is a large span of time involved when studying the effects of parental divorce during childhood on offspring in adulthood, allowing for other factors to influence adult outcome as well.

Second, Amato and Keith (1991) concluded from the meta-analysis that the methodology and samples used are related to the outcome of the studies reviewed. That is, clinical studies tend to show a much more serious picture of the effects of parental divorce on offspring than sociological studies. Further, controlled studies demonstrate weaker effects than uncontrolled studies. For example, when other family of origin characteristics are not controlled for, the consequences of parental divorce are overestimated.

In sum, the nature of studies on the effects of parental divorce on young adults are primarily large national survey studies, uncontrolled clinical reports or small self-report studies on college students. Furthermore, despite the reports that marital quality is poorer and marital stability is lower for adult offspring of PD compared to IF, a thorough assessment of the current relationship quality of adults of PD and their partners, including both self-report and observational data has not been conducted. Furthermore, most of the studies on adults were on subjects in college populations who were not yet in a stable committed relationship, thus making it difficult to draw conclusions about their relationship functioning.

The present study

In the present study, we set out to examine the relationship functioning of couples in which one partner has experienced parental divorce. Distressed couples were excluded from the study. As this is the first thorough investigation of the relationships of adults from divorced homes making use of both self-report and observational measures, our primary objective was to be descriptive. Nonetheless, several hypotheses were developed. Couples with one partner with PD, were hypothesized to report poorer relationship adjustment than couples without PD. More specifically, compared to IF couples, couples with PD were expected to report lower commitment, (dedication to the relationship), more destructive communication, poorer problem solving ability, higher problem intensity, higher rates of verbal and physical aggression, less intimacy, greater avoidance of relationship issues, lower relational efficacy, and lower relationship and sexual satisfaction. It was also hypothesized that couples

with PD would demonstrate more negative communication behavior than couples from intact families during a problem solving discussion. Additionally, differences between PD and IF couples on demographic variables as well as psychological health and relationship history (previous divorce) are described. Lastly, differences in reported perceptions of several aspects of family of origin are described: perceived marital quality of parents, perceived conflict in family of origin, as well as the quality of the relationship with each parent.

METHOD

Subjects

Sixty seven couples were selected from a group of 89 couples who participated in a larger study. Twenty-two of the 89 couples were excluded from the present study because they were very distressed and/or asked for an intervention. The 67 couples were non- to mildly distressed couples and came from two medium size cities in the Netherlands. Forty-three percent of the couples were married, 37% were cohabiting and 19% lived apart. The mean number of years together was 7 (SD = 6, range = 1-30). Thirty-four percent of the couples had children. Mean age for males was 36 (SD = 10, range = 20-63); mean age for females was 33 (SD = 8, range = 19-53). Fifty-one percent of the males had a religious affiliation as well as 52% of the women, the rest of the subjects had no religious affiliation. Twenty-eight percent of the males had a university education as well as 21% of the females. For an overview of the demographics of sample, see Table 7.1.

For 40 percent of the couples (n=27), one of the partners had divorced parents (PD): 13 males and 14 females. There were no couples for which both partners had divorced parents. For the remaining sixty percent of couples both partners came from intact families of origin (IF), that is, they did not experience parental divorce (n=40).

Table 7.1
Background characteristics of couples with and without Parental Divorce (N = 67)

	All (N=67)		PD (n=27)		IF (n=40)	
children (n, %)	23 (34%)		9 (33%)		14 (35%)	
marital status (%)						
married	43		52		38	
cohabitating	37		33		42	
living apart	19		15		8	
nr. years together						
(x, sd)	6.9 (6.0)		6.9(6.0)		6.9(6.6)	
range	1-29					
	males	females	males	females	males	females
age (years)						
x (sd)	36 (10)	33 (8)	34 (9)	32 (7)	37 (11)	33 (8)
range	20-63	19-53				
religion(%)						
catholic	39	43	30	37	45	47
protestant	9	6	11	7	8	5
other	3	3	7	4	0	3
none	49	48	52	52	47	45
education (%)						
elementary	5	2	4	0	0	0
high school and higher education	67	77	85	81	60	67
university	28	21	11	19	40	23
previous divorce (%)	13	19	15	15	13	23
previous separation (%)	19	12	19	15	20	10
previous psychother. (%)	22	31	22	22	23	38
previous couples ther. (%)	22	19	22	19	23	20

Procedure

Couples were recruited through media advertisements, brochures and posters for participation in a longitudinal study on family of origin, communication and relationship development. To take part in the study, couples were required to have had a commitment to their relationship of at least one year and have plans for a future together. To reward subjects for their participation, a book on relationships written by one of the co-authors was given upon completion of the assessment, which took approximately three hours.

At the start of the assessment, couples were asked to give informed consent to participate at which time the interviewer explained the procedure of the

study, the possible risks involved, and answered any questions the couples had at that time. Couples were also told about the longitudinal plans of the study. Partners separately completed a set of questionnaires and were videotaped during two discussions. For more detail, see Chapter 4.

Measures

Personal History Questionnaire (PHQ; Van Widenfelt, Schaap, & Verdellen, 1990). The PHQ was used in the present study to gather relevant background information. A range of questions were included about the subject, including age, marital status, education, and religion. Subjects were also asked about their family of origin: if their parents were divorced, if either parent had a psychiatric history, if either parent died during their childhood, and their age at time of parental divorce or death. Finally, subjects were asked to rate their parent's marital quality on a scale of 1-7 during their childhood (through age 12) and during their adolescence (age 12-18), and to rate on a 1-5 scale the quality of their relationship with their parents during childhood and presently.

Maudsley Marital Questionnaire (MMQ; Cobb, McDonald, Marks, & Stern, 1980; Arrindell, Boelens, & Lambert, 1983). The MMQ is made up of three subscales: relationship, sexual and general life (dis)satisfaction. Arrindell et al. (1983) have validated the questionnaire for the Dutch population. In the current study, Chronbach alphas on the relationship (dis)satisfaction scale are a = .93 and a = .93 for males and females respectively (N=89), for the sexual (dis)satisfaction subscale a = .86 and a = .79 for males and females respectively (N=89) , and general life satisfaction subscale a = .57 and a = .66 for males and females respectively (N=89).

Conflict Tactics Scale (CTS; Straus, 1979). This questionnaire measures three forms of relationship conflict tactics. For the current analyses, the verbal and physical aggression subscales (reported by self) were used. The questionnaire has a long history of use and has been reported to be reliable and valid. Chronbach alphas in the present study for the verbal aggression scale are a = .72 and a = .82 for males and females respectively and a = .58 and a = .78 for physical aggression, males and females respectively (N=89).

Interactional Problem Solving Inventory (IPSI; Lange, 1983; Lange, Markus, Hageman, & Hanewald, 1991). The IPSI, a 17 item Dutch scale, was used to measure problem solving ability. The reliability and validity of the IPSI are

reported to be satisfactory. For the present sample, Chronbach alphas for males and females were a = .92 and a = .93, respectively (N =89).

Marital Agendas Protocol (MAP; Notarius & Vanzetti, 1983). This questionnaire has four parts. Two parts were used in the present study to assess problem intensity and relational efficacy. For problem intensity, subjects were asked to rate twelve problem areas on a scale of 1-100. For assessing relational efficacy, subjects were asked to rate how many out of ten discussions for twelve problem areas he or she believes will be resolved by the couple to their mutual satisfaction. In a series of studies the measure has been found to be reliable and valid. In the current study, Chronbach alphas for males and females were a = .82 and a = .81, respectively (N=89) for relational efficacy and a = .75 and a = .80 for problem intensity, males and females respectively (N=89).

Commitment Inventory (CI; Stanley, 1986). The CI measures two aspects of commitment. In the present study, the subscale personal dedication was used, referring to an intrinsic desire to work on, improve and stick with a relationship. This subscale is made up of 16 items. Reliability and validity of the CI have been established by Stanley (1986). In the present study, Chronbach alphas for the personal dedication scale were a = .78 and a = .77 for males and females respectively (N=89).

Intimacy Scale (IS; Schaap, Van Widenfelt, & Ebbeng, 1990). The IS is a new instrument developed by the authors based on a previous study on intimacy (Bus, 1989). The IS was used in the current study to assess level of reported intimacy in the relationship. Forty-two items were derived from the study by Bus and put in questionnaire format. Subjects rate the items on a five-point scale as to what degree the item is characteristic of their relationship. Items included terms such as "warmth", "tenderness", "safety", "being yourself" and "being on the same wave-length". The scale proved to be reliable in the present study: Chronbach alphas for males and females were a = .97 and a = .98, respectively (N=89).

Communication Skills Inventory (CSI; Kerkstra, 1985). The CSI is a 50 item Dutch questionnaire made up of three subscales. For the present analyses, two subscales of the CSI were used: destructive communication and avoidance. Kerkstra reports the scale to be reliable and valid. In the current study, Chronbach alphas for males and females for the destructive communication subscale were a = .90 and a = .91, respectively, and for the avoidance subscale, a = .81 and a = .82, respectively (N=89).

Family Environment Scale (FES; Moos & Moos, 1981). The FES is a scale made up of 99 items about how a family member experiences and views their family. There are 11 items for each of the nine categories. Each item is answered with "yes" or "no". The scale has been translated for the Dutch population by de Coole and Jansma (1983), who have also done the work on norms, reliability and validity for the Netherlands with mixed results. In the present study instructions were given to each partner to rate retrospectively their family of origin during their childhood (through age 18) using the scale. For the current study the conflict subscale was used which consists of 11 items, such as, "We fight a lot in our family", "Family members often criticize each other", "Family members sometimes hit each other". For the conflict subscale, KR 20 = .59 and .63 for males and females respectively (n=56).

Hopkins Symptom Checklist (SCL-90; Derogatis, 1977; Arrindell & Ettema, 1986). The SCL-90 is the most popular instrument for measuring psychological adjustment or health symptoms. It has excellent psychometric properties. The SCL-90 was translated and validated for the Dutch population by Arrindell and Ettema (1986). In our sample the total score of the SCL proved to be very reliable (Chronbach's alphas for males and females were a = .97 and a = .98 respectively, N = 89).

Codebook of Marital and Family Interaction (COMFI; Notarius, Pellegrini, & Martin, 1990). COMFI is a micro-analytic observational coding system used to code the problem discussion in this study. The coding system requires the assignment of one of 32 mutually exclusive codes to each spoken thought. Content, affect and function are accounted for in each code. The 32 codes are organized into six summary codes: problem solving facilitators (PSF), problem solving inhibitors (PSI), emotional validators (EMV), emotional invalidators (EMI), self-disclosures (SDS), and depressives (DEP). In the present study, problem discussions (problem area chosen from the MAP by the interviewer based on highest summed partner rating) lasted approximately 20 minutes, resulting on average 600 codes per discussion. Haefner, Notarius, and Pellegrini (1991) report the following alphas for the first four summary categories: PSF a = .89, PSI a = .60, EMV a = .98 and EMI a = .91. In the present study, reliability checks were periodically done on approximately 25% of the discussions coded. Reliability's on summary categories, using kappa averaged k = .64 (range .51 - .71) and observed agreement averaged .76 (range .64 - .80). These kappa's are similar to what Haefner, et al. (1991) report and are satisfactory. Coders were

blind to the status of couples and when coding assignments were used as reliability checks. For additional information on the coding system, see Chapter 4.

RESULTS

Parental divorce versus intact family of origin: Background variables

Demographics

First, demographic characteristics of the parental divorce (PD) group (n = 27) and the intact family (IF) group (n = 40) were compared. For females, no significant differences were found in age, marital status, number of years together, children, education, nor religion. The same result was attained for males with the exception that the groups differed significantly on education: 11% of males in the PD group obtained a university degree versus 40% of males in the IF group. Further inspection of percentages for only those males or females who experienced parental divorce (thus excluding partners) revealed no significant differences between groups with again the exception for males level of education: again 11% of males of PD obtained a university degree versus 40% of males of IF (C^2 (df=1)=6.6, $p < .01$). Thus, parental divorce is associated with males obtaining a lower level of education.

Relationship history and psychological health

Next, relationship history of the two groups (PD and IF) were compared. There were no significant differences for males and females in being previously divorced or separated from another partner. (See Table 7.1 in which results for the PD group versus the IF group are reported). Symptoms of psychological health, previous treatment, and general life (dis)satisfaction were also compared for the two groups (PD and IF). No statistically significant differences were found. (See Tables 7.1 and 7.3.)

Perceived relationship with parents, parental marital quality, and conflict in family of origin

Differences in reports of relationship with parents and ratings of perceived parental marital quality were tested using two-tailed T-tests, comparing scores of male (13) and female (14) partners of divorced parents with respondents that

came from intact families (n = 40). Females with divorced parents reported statistically significant poorer relationships with their fathers in the past, whereas the quality of their current relationship with their fathers was not significantly different from the intact family group. There were no statistically significant differences between males from parental divorce homes and intact families in terms of perceived quality of relationship with parent during childhood. Males with divorced parents reported statistically significant poorer relationships with their fathers currently, whereas females with divorced parents reported statistically significant poorer relationships with their mothers currently. Perceived parental marital quality during childhood and adolescence was rated statistically significant poorer by the males with PD than those without PD; the same was true for females of PD. There were no significant differences in perceived level of conflict in family of origin between both groups. (See Table 7.2.)

Table 7.2
Mean and sd's on self-report measures on quality of relationship with parents and parental marital quality For males and females with and without parental divorce

	males				females			
	PD (n=13)	IF (n=40)	t(52)	p	PD (n=14)	IF (n=40)	t(52)	p
Rel with mother childhood	3.0 (1.4)	3.3 (0.9)	-0.72	.48	3.4 (1.3)	3.2 (0.9)	0.48	.63
Rel with mother currently	2.9 (1.5)	2.9 (1.7)	-0.10	.92	3.9 (1.0)	3.2 (1.3)	2.12	.04
Rel with father childhood	2.3 (1.7)	3.1 (1.1)	-1.40	.18	2.3 (1.3)	3.3 (1.0)	-2.63	.02
Rel with father currently	1.0 (1.1)	2.3 (1.8)	-2.98	.005	2.2 (1.6)	2.5 (1.7)	-0.61	.54
Parental mar qual childhood	2.9 (1.8)	4.8 (1.6)	-3.27	.004	3.4 (1.8)	4.9 (1.7)	-2.71	.01
Parental mar qual adolescence	2.4 (1.6)	4.3 (1.6)	-3.13	.008	1.8 (1.3)	4.0 (1.9)	-4.53	<.001
Conflict level in family of origin	6.4 (3.1)	4.8 (2.4)	1.37	.20	5.25 (1.7)	5.2 (2.6)	0.08	.94

Age at parental divorce

The mean age of the subjects at parental divorce for males was 16.5 (SD = 10.5), ranging from before age 1 to 35 years of age. Of the 13 males, six had experienced parental divorce before age 18. The mean age of parental divorce for females was 15.8 (SD = 6.5), range 7-30). Of the 14 females, 10 experienced parental divorce before age 18.

Examination of parental divorce as a risk indicator for relationship functioning

Parental divorce and self-report of current relationship functioning

Differences in reports of current relationship functioning were tested using one-tailed T-tests (see Table 7.3), comparing scores of couples with one partner of PD (n=27) with couples that both partners came from intact families (n=40).

As Table 7.3 reveals, there were hardly any differences between couples with and without PD on variables reflecting aspects of relationship quality. In fact, upon inspection of the mean scores, a difference in the opposite direction is indicated. That is, there appears a tendency for male and female partners, with one partner who has divorced parents, to rate their relationship more positively than those couples from intact families of origin.

Parental divorce and relative frequency of communication behavior

A next set of analyses were conducted using observational data on the relative frequency of problem solving and emotionally expressive communication behavior. Results reveal no significant differences between the parental divorce and intact family groups across communication behavior in the hypothesized direction. Inspection of the means of male and female partners of couples with parental divorce tended to demonstrate more positive and less negative communication than for male and femal partners of couples from intact families. Females of PD demonstrated significantly more frequent use of problem solving facilitation than female of IF. Males of PD showed a trend in the same direction. See Table 7.3.

Table 7.3
Means and standard deviations of variables for couples with and without Parental Divorce

Variable	Parental Divorce (n = 27) M	SD	Intact Family (n = 40) M	SD	t-value	p(1 tailed)
	Self Report Data					
Male partners						
Relationship (dis)satisfaction	11.9	8.6	14.5	10.7	-1.09	.14
Sexual (dis)satisfaction	9.4	7.3	9.6	8.4	-.08	.47
Problem solving ability	68.0	9.0	64.8	12.5	1.22	.11
Problem intensity	145.7	94.9	225.8	137.3	-2.82	.003
Relational efficacy	100.8	13.2	96.4	15.0	1.25	.10
Verbal aggression	11.4	4.2	12.2	5.1	-.65	.25
Physical aggression	13.2	3.1	12.1	1.7	1.69	.05
Commitment	88.5	14.8	87.6	12.7	.25	.40
Avoidance	42.6	5.6	42.1	4.9	.43	.33
Intimacy	163.8	23.4	164.5	27.5	-.11	.45
(Negative) Communication	67.0	8.8	64.7	9.3	1.02	.15
Health symptoms (SCL-90)	120.6	37.5	121.2	24.8	-.07	.47
General life(dis)satisfaction	9.5	3.7	9.5	4.6	.01	.45
Female partners						
Relationship (dis)satisfaction	13.2	9.3	16.1	11.6	-1.12	.13
Sexual (dis)satisfaction	10.5	7.1	9.8	7.2	.40	.34
Problem solving ability	68.0	11.7	66.5	10.5	.53	.30
Problem intensity	159.1	101.0	219.4	164.1	-1.86	.03
Relational efficacy	102.1	12.8	96.0	16.3	1.71	.04
Verbal aggression	15.9	6.9	16.9	7.1	-.54	.29
Physical aggression	12.9	3.9	14.1	5.3	-.89	.19
Commitment	88.5	11.4	85.3	12.9	1.06	.14
Avoidance	43.3	5.7	43.0	4.8	.20	.42
Intimacy	161.8	23.6	160.7	31.0	.16	.43
(Negative) Communication	65.4	9.4	64.7	10.1	.29	.38
Health symptoms (SCL-90)	121.4	22.0	134.6	37.4	-1.78	.04
General life(dis)satisfaction	10.0	4.7	9.9	4.5	.06	.48
	Observational Data					
Male partners						
ProblemSolvingFacilitating	34.9	10.0	31.0	11.7	1.45	.07
Problem Solving Inhibiting	17.7	9.7	19.9	13.9	.77	.22
Emotional Validation	24.0	10.7	21.5	10.2	.95	.18
Emotional Invalidation	16.1	8.6	18.0	8.4	-.86	.19
Female partners						
ProblemSolvingFacilitating	34.0	9.8	27.9	10.5	2.40	.01
Problem Solving Inhibiting	16.2	10.4	19.9	12.5	-1.32	.10
Emotional Validation	20.7	8.1	22.3	14.7	-.58	.28
Emotional Invalidation	20.9	9.3	21.4	10.3	-.22	.41

DISCUSSION

The present data do not confirm the hypothesis that adults who have experienced parental divorce at some point in their lifetime will have poorer relationship adjustment compared to adults from intact families. In fact, subjects with divorced parents and their partners tended to be more positive when reporting about their current marital quality than subjects from intact families of origin. There are a number of possible explanations to consider related to this finding, which is at odds with much of the literature.

It is possible that couples in the present study are denying potential negative effects on their own relationships as well as the problematic effects of their parent's divorce. As self-report data are especially vulnerable to this sort of bias, additional analyses were planned using observational data. However, observations of communication behavior during a problem solving task did not reveal significant differences in the frequency of facilitative and destructive communication behavior between the two groups either. Thus, denial is an unfeasible explanation for the findings.

Another possible explanation for the present finding is that it is too early to detect the effect of parental divorce on relationship quality and divorce for most of the couples in the current sample. Perhaps the effects of parental divorce emerge only after a couple is a greater number of years together. This issue could be addressed in two ways: Cross-sectionally or by longitudinal study. A requirement for cross-sectional study is that the sample comprises a broad range of years together for couples. In the current samples this requirement was met. Inspection of the data with this issue in mind did not reveal that PD couples that were longer together experienced less relationship quality or stability compare to IF couples. One should bear in mind, however, that the number of couples on which this contention is based is rather small. A larger sample is neccesary to deal more convincingly with this issue. Another way of investigating the long term-effects of parental divorce is by means of longitudinal study. Since the present study is a longitudinal study, this will also be able to be investigated over time (see also Chapter 9).

The present findings diverge from the negative long term effects of divorce that Wallerstein and Blakeslee (1989) and others describe. This divergence may be due to differences in sample composition. Studies, such as Wallerstein and

Blakeslee (1989), consist of primarily clinic populations. In constrast, the present sample is made up of a healthy normal sample, with a range from non- to mildly distressed couples. Critical here is the recruitment method used. In the present study couples were recruited for a study on communication and relationship development (not divorce or treatment). Studies using clinical subjects to understand the relationship of parental divorce with functioning in offspring may be biased given that divorce appears to be more common among such families as do other problems, ranging from higher rates of psychopathology and lower SES. Amato and Keith (1991) conclude in their meta-analysis, that findings are expected to be weaker in non-clinic healthy populations. The findings of the current study indicate that the relationship of parental divorce with relationship functioning in adult offspring are not merely weaker, but appear to be absent in the normal population.

Though Amato and Keith (1991) found in their meta-analysis that adult children of divorce were worse off on a range of variables, they qualify their conclusion with stating that the effects sizes are small. It might be that the negative impact of parental divorce on offspring can only emerge in studies using specific populations (e.g., patients) or in large scale sociological studies given their huge sample sizes. The size of the sample used in the present study may be too small in size to detect negative consequences of PD as well as the population of relatively happy couples not yet experiencing severe marital distress.

The findings further diverge from many studies using college populations. As already mentioned, in such studies, young persons are often not yet in a relationship, unlike the present sample where couples were required to be in a committed relationship with plans for a future. Many studies on college students report individuals expressing fears of intimacy or partners leaving them. Though single persons in college from parental divorce homes may have fears about future relationships, the present study indicates that, once they are in a committed relationship, they appear to function as positively in relationships as persons coming from intact families of origin.

In addition to examining the relationship of couples with and without PD, the relationships of adult children of divorce with their parents was investigated. Many studies in the literature report that adults of PD have poorer relationships with their parents. Consistent with the literature, in the present study males of PD reported that their current relationship with their father is

significantly poorer than males of IF, whereas females of PD, reported that currently their relationship with their mother is worse than females of IF. A possible clinical implication of this finding may be that therapists working with families going through a divorce should give special attention to the relationship of fathers with their sons and mother with their daughters when their children are young adults.

CONCLUSION

The results of the present study are at odds with clinical accounts and sociological studies published in a number of leading journals such as the *Journal of Marriage and the Family* over the last 20 years. However, a recent search in *Dissertation Abstracts* revealed 21 dissertations conducted in the last five years in the US on adults from divorced homes with the dominating conclusion being no negative effects of PD on relationship functioning, a finding consistent with the findings of the present study. The majority of authors examined some aspect of relationship functioning and conclude that there are few differences between adult children of divorced and intact families. The present study provides additional information on the relationships of adult children of divorce to previous studies by providing observational data as well as a cross-cultural data set. In conclusion, parental divorce needs to be viewed as a diverse experience that should not be too quickly generalized about. Many young adults who have experienced parental divorce may be "protected" from the negative consequences of divorce by other factors, such as remarriage of parents, a positive relationship with significant others besides their parents, and their own partner choice. It may be that in terms of relationships, the negative impact of parental divorce decreases as young adults form their own more permanent relationships and have their own relationship experiences to add to their parents experiences.

Chapter 8

Preventing relationship distress and maintaining relationship satisfaction: Description of the intervention

This chapter provides a more detailed description of the preventive intervention, it's basis, implementation, sessions, and a discussion of issues related to focusing on a risk group. The intervention is comprised of six sessions and a booster session. The six session program is divided into two parts. The first part is primarily skills-oriented, providing couples with basic communication and problem solving skills and ways to effectively handle negative emotions and conflict. The second half of the program provides continued stimulation and opportunity for couples to practice the skills of the first three sessions. In addition, couples are provided with an understanding of how familial and cultural factors may influence the way they relate to each other, particularly expectations, personal needs, and dealing with conflict and emotions. The program ends with couples drafting up a contract based on what they find to be the most useful tools in the program for their own relationship. In the booster session, couples meet with their trainer approximately nine months after the initial intervention and discuss the aspects of the intervention that were useful for their relationship, which were not, and what they would like to work on or change in their contract. Issues related to evaluating the intervention with risk couples are reviewed.

INTRODUCTION

The first criteria set by the APA (Price, Cohen, Lorion, & Ramos-McKay, 1988) for an effective prevention program is a clear description of the risk group and the emotional or behavioral condition to be prevented. The reader is referred to Chapter 2 for a literature overview conducted on risk groups and to Chapter 7 for a description of the risk group chosen for evaluation in the present study, adults who have experienced parental divorce and their partners. Also in Chapter 2, a review of the literature on the psychological, social and interactional processes related to relationship distress can be found. Reviewing the literature, was a necessary step as interventions targeted at preventing severe relationship distress and divorce are expected to be the most effective when primarily based on the risk factors related to relationship quality.

The factors found to be related to relationship quality include communication skills, conflict management skills, problem solving skills, relationship beliefs, relational efficacy, sexual satisfaction, and intimacy. These factors have a direct impact on relationship quality and thus provide a good foundation for program development. Obviously, other variables are also important for relationship quality that are not addressed here offering other possibilities for preventive efforts. We have restricted ourselves to those that appear most directly related to relationship quality and are able to be translated into tangible goals for an intervention.

The success of a program depends on how well factors associated with distress and divorce have been identified and how well a program can address these factors. The program offered by Howard Markman and his colleagues (Markman, Blumberg, & Stanley, 1989) (see also Chapter 2) has been chosen as a model program since it successfully translates the risk factors described in the literature into a practical preventive intervention. In addition, its effectiveness has been demonstrated with long-term follow-up data. The preventive intervention described below is modeled after Markman and his colleague efforts, adapting and making additions relevant for the Dutch culture and for a focus on family of origin influences on current relationship functioning. The unique aspect of the Dutch intervention is that it focuses on the intergenerational transmission of relationship distress and divorce and is targeted at a risk group.

The following is a description of the delivery of the program and the content of each session. Additional detail the trainer's manual as well as a manual for couples can be provided upon request (Schaap & Van Widenfelt, 1990a; 1990b). Lastly, issues related to risk groups are discussed.

Program delivery

Structure of sessions

The program is conducted in six sessions lasting two hours and 45 minutes per session and is offered to an average of four couples at a time. For each couple a personal trainer is assigned, and in addition a supervisor is present during the sessions to assist the trainers. All participants are given a manual at the first session (Schaap & Van Widenfelt, 1990b). During each session, couples spend a maximum of 20 minutes listening to lectures with other couples, with the bulk of the session spent away from the group, practicing skills with a personal trainer. At the end of each session, couples are given homework assignments to aid in practicing the new skills, which are discussed at the start of the following session. Also, at the end of each session, an evaluation of the session is conducted. (See Table 8.1 for an example of the session structure.)

Table 8.1
Sample of program structure: Session 2

	Minutes	*Total time*
2.1 Opening	05	05
2.2 Discussion: Home exercise	05	10
2.3 Lecture 2: Promoting intimacy: Expressing feelings and managing conflict	30	40
2.4 Exercise 1: Conflict styles	10	50
2.5 Exercise 2: Expressing feelings	65	115
2.6 Break	10	125
2.7 Home exercises:		
Exercise 3: Communicate	05	130
Exercise 4: Caring days	10	140
2.8 Closing and evaluation	10	150

Basic skills and concepts are consistently taught in the program; at the same time, the program can be tailored to couple's specific needs. For example, one couple may need more practice on expressing and listening to feelings, whereas another couple may benefit from focusing primarily on managing the escalation of conflicts during practice sessions. Both are target behaviors consistent with the program goals; flexibility and sensitivity to what the couple could most benefit from practicing is important.

Trainers

In the present study, the trainers were Master's level Clinical Psychology students with some prior clinical experience but no prior experience working with couples. Trainers went through a training program of 60 hours and were supervised throughout the duration of the program implementation. In addition, they were instructed to closely follow a detailed manual on delivering the program (Schaap & van Widenfelt, 1990a). The trainers served as coaches, providing active feedback and encouragement to the couples, reinforcing desired behavior and correcting undesired behavior as defined in the manual.

Estimated costs of program implementation

For the present study, the students that served as trainers were not paid nor were couples who participated charged. Table 8.2 shows an estimate of the cost based on running the training with four couples, four trainers and one supervisor (the format used in the present study).

The cost of the training is estimated at 4365 Dutch Guilders, that is per couple 1092 Dutch Guilders (approximately 642 US Dollars per couple). Though we can rationalize the cost outweighs the cost of relationship distress and divorce to society, the cost, may be a serious barrier to couples participation. The need for subsidizing the program with other funding and/or evaluating possibilities for a more efficient delivery is indicated. For example, reducing the presence of a supervisor and/or having trainers work with more than one couple per session.

Table 8.2
Estimated cost of program implementation

Expense	Task	Time (hrs)	est. fl/hour	Cost
Trainers	Training	16.5		
	Preparation	3		
	Supervision	6		
			fl. 30-	fl 765.- (x4)=fl. 3060.-
Supervisor	Supervision	25.5	fl. 50-	fl 1275.-
Materials				fl. 30.-
				Grand total: fl 4365.-
				per couple fl 1092.-($ 642)

Program adaptation

The intervention used is primarily based on the intervention of Markman et al. (1989). As pointed out in Chapter 2, one could argue that no changes should be made in an existing and effective program to guarantee a replication of the effectiveness and to prevent that critical elements of the program will be lost. On the other hand, the identical replication of a program in a different cultural situation with a different target group could also reduce the effectiveness of the program. This issue is addressed in the described program by keeping the critical elements reported in the literature, such as communication skills (listening and speaking), problem solving skills, conflict management skills and a focus on realistic cognitions and expectations, in the program.

New elements have been added to the program which are believed to be essential to the needs of the risk group, such as examining the influence of origin family experiences on current relationship functioning. Thus, the emphasis on the influence of origin families is the special contribution of this program to existing work. When having participated in this session, couples report gaining new insight about their relationship as well as enjoying having learned more about their partners familial background. Reactions have ranged from strong emotions to relief in having a new understanding or new attributions to make about their current way of interacting together. Further evaluation of this session is needed and is briefly discussed in Chapter 9.

In addition to adapting the program to the needs of the risk group, it is also important to adapt the program to local and cultural characteristics of the sample in order to increase receptivity to the program and to avoid unnecessary

barriers. For example, this issue was faced when translating program materials in English into the Dutch language. A literal translation was not possible. Four bilingual translators of different ages, gender and backgrounds were used to control for the accuracy of the translation and the use of modern Dutch expressions, values and habits. In addition, following the local custom of drinking coffee with cookies in the early evening contributed to a positive atmosphere in the sessions. Further, a great deal of thought was given by many of the students involved in the project as to what to call the intervention. *De Relatie Cursus* (The Relationship Course) was chosen to emphasize that the program was not a therapeutic intervention and to fit in with the popularity of taking courses in the culture.

Program sessions

Session one

At the start of Session 1, an overview of the program and it's history is given, and trainers and couples are introduced to one another. The first mini-lecture, "What is communication?" (Gottman, Notarius, Gonso, & Markman, 1976) is then presented to the group of couples by one of the trainers. Communication is defined as the sharing or exchange of information. In the model the separate roles of the speaker and listener are highlighted. Partners are then given the opportunity to practice being a speaker and listener in an exercise. Next, a mini-lecture is given by another trainer on communication skills, with the greatest focus placed on the importance of listening and giving feedback. Ten effective and ten ineffective ways of communicating are presented (see Table 8.3.) For example, partners are taught to use "I" statements rather than placing blame on each other. Couples are given a card with 'do's and don'ts' (see Table 8.4) to assist them in remembering the skills while having a discussion.

The group then breaks up and couples practice discussing a low conflict topic in separate rooms with a trainer present. While the couple is practicing, their personal trainer gives constant feedback on their use of effective and ineffective communication. As homework, couples are asked to have one 'friendship' conversation at home to practice their listening skills before the next session.

This format of giving one or two mini-lectures, spending the majority of the time practicing the new skills, and then assigning a homework task is the

Table 8.3
Effective and ineffective communication

10 Ineffective communication techniques

Listener and Speaker

1. *Summarizing self syndrome* - each person continues to restate his or her position.
2. *Drifting off beam* - While discussing one problem area, continually drifting into other problem areas or topics.
3. *Kitchensinking* - While discussing one problem area, bringing in many additional problem areas to the discussion.
4. *Cross-complaining* - Each partner states a complaint in response to a complaint.
5. *Mindreading* - When one person assumes what another person is feeling or thinking without asking the person.
6. *Blaming* - Accusing the other person of something.
7. *Yes-butting* - Initially agreeing with, then refuting partner's position. Experienced by partner as a disagreement.
8. *General accusations*: "you always" "you never" - Making general statements about the partner.
9. *Using insults or character assassination* - Insulting or criticizing your partner.
10. *Guilt induction* - indirectly trying to make your partner feel guilty for his or her behavior.

10 Effective communication techniques

Listener skills

1. *Summarize* your partner in your own words and use summaries that reflect both content and feeling. Try to *understand* how your partner feels demonstrate understanding not agreement. Try to see if it would make sense to feel that way even if you don't feel that way or you don't agree for yourself. Give clear *feedback* to your partner.
2. *Check out* your summary; ask your partner if he or she feels understood.
3. Give *positive* feedback.
4. Use *stop actions* and check out (ask for clarification).
5. Attend to partners *nonverbal* behavior (voice tone, eye contact, head nods, body position).
6. Be an *active* listener (good eye contact, be verbally expressive: uh huh, yeah, head nodding).

Speaker skills

7. Use *XYZ* statements to express your feelings.
8. Stay *on task* or "on beam" (stick to one issue).
9. Use *I statements*; speak for yourself.
10. Keep messages *brief* and to the point.

Table 8.4
The do's and don't of speaking and listening

SPEAKER	
DO'S	***DONT'S***
I FORM	THEY, YOU
CONCRETE SITUATIONS	ALWAYS, NEVER
CONCRETE BEHAVIORS	GENERALLY, TYPICALLY
HERE AND NOW	AND THEN
EXPRESS OPENLY	BLAME

LISTENER
DO LISTEN ATTENTIVELY (HM, NODDING, EYE CONTACT)
DO SUMMARIZE (REPEAT USING OWN WORDS)
DO ASK OPEN QUESTIONS (IF FEELINGS ARE EXPRESSED INDIRECTLY)
DO GIVE POSITIVE FEEDBACK (I LIKE THAT, WELL DONE)
DO RESPOND WITH FEELINGS (THAT IRRITATES ME)

format used throughout the training. Also, each session ends with all participants filling out an evaluation form and a brief discussion of the evaluation with the group as a whole.

Session two

At the start of Session two, as wells all the following sessions, trainers meet briefly with the couple they are working with to discuss the homework assignment. The focus of Session two is on expressing negative feelings and managing conflict. Characteristic styles of handling conflicts are presented first (Buunk, Schaap, & Prevoo, 1990). Three patterns are described: (1) both partners being avoidant of conflict; (2) both partners engaging in conflict and negative escalation taking place; and (3) one partner trying to engage the other partner who withdraws. Trainers perform a role play to demonstrate the different styles. Couples are told these are ways that they have learned to handle their differences, negative emotions, and disappointments. The goal of the session is to learn how to break such unproductive or hurtful cycles and learn more productive ways of handling differences and expressing needs. It is pointed out that there is an ideal level of temperature or tension needed to resolve conflicts. If it is too high or too low, the temperature is not conducive for effective problem solving (Notarius, 1990).

Couples are then given suggestions for ways to constructively deal with conflict for each unconstructive pattern. Here, a link to the effective communication techniques taught in Session 1 is made, such as couples who enter a pursuit-withdrawal pattern are advised to frequently switch speaker and listener roles. Couples that escalate into negative interaction when they have a disagreement are given tips such as, call a 'time out' and reschedule an agreed upon time to discuss the issue. Couples then meet separately with their trainers and are assisted in discovering their own conflict management style and applying rules for effective conflict management. For the homework task, an exercise called "caring days" (Stuart, 1980) is introduced.

Session three

An effective six step strategy for problem solving is introduced in Session three: (1) discussing the problem, (2) brainstorming, (3) formulating a list of pros and cons of possible solutions, (4) choosing the best solution, (5) making a specific plan to carry out the solution and (6) evaluating the plan. Emphasis is placed on choosing a right time to discuss and solve problems. Couples are further told to expect that they may need to loop back many times in this six step process before they reach a satisfying solution to their problem.

In this session couples also begin to discuss underlying needs and wishes that may interfere with effective communication and problem solving, such as: closeness and distance, power and control, love and respect, feeling attractive, personal growth and emancipation, and gender roles. A role play is used by the trainers to clarify how "hidden agendas" (Gottman et al., 1976) operate in couple's communication, that is, while it seems one issue is being discussed, there is actually another issue at stake that is implicit or hidden. An example of a listener's hidden agenda is a wife may say to her husband, "I wish you would see a doctor, you look really under the weather" and he may respond by thinking "she thinks I am unattractive" (whereas her intention was to express concern). An example of a "speakers" hidden agenda would be a husband says to his wife, "You are always on the telephone", whereas he may actually be feeling hurt and thinking that she does not want to spend time with him.

These underlying issues or themes continue to be discussed in the second half of the program, particularly in terms of the influences of past experiences on the present. Couples are told that they may find it difficult at times to use their new skills, especially when dealing with an issue that raises negative emotions

and unmet needs. Since it is can be difficult for couples to identify when underlying themes or "hidden agendas" are operating, a set of questions is presented to them to assist them, such as, "Do you feel put down, stupid, incompetent, not consulted or not listened to?"" Do you feel your partner is not interested in you or responsive to you?" Other indications are presented as well, such as when an issue is discussed over and over again and one says to oneself, "here we go again". Another example is the sense that the simplest most trivial issues become major arguments.

As a homework assignment couples are told to have a discussion using the problem solving steps, to have another discussion specifically addressing a hidden agenda in their relationship that may be interfering with problem solving, and lastly to do a caring days assignment.

Session four

In Session four, couples are helped to explore the influence of their origin families on their current relationship with the use of a "genogram" (McGoldrick & Gerson, 1985). Couples are told that their relationship does not exist in a vacuum and that patterns can be seen from one generation to the next. It is emphasized that family of origin experiences have a powerful influence on who they are, how they behave and relate to each other. Couples are guided to consider (a) how family members expressed their emotions, particularly negative emotions; (b) how conflicts and disagreements were handled in their family; (c) how family members expressed themselves and communicated with one another more generally; and (d) relevant beliefs and expectations regarding relationships. Couples are asked to examine both positive and negative aspects of relating in their family of origin and discuss how these patterns are found back in how they relate to one another, either through repeating or rejecting the patterns. Once patterns are identified, couples are encouraged to identify what they would like to hold onto from their origin family and to come up with ways to break patterns they would like to change by using their newly learned skills and insights. Most of the session is spent doing this exercise and the homework assignment is to set aside a time during the week to continue the discussion.

Session five

Session five focuses on expectations and beliefs about relationships. Common myths held in Western cultures in regard to relationships are

presented. For example, the belief that disagreements are destructive in a relationship or the belief that love and the expression of anger or irritation are incompatible. It is emphasized that many of the beliefs and expectations they hold about relationships are not only learned in their culture but also in their past experience in family and intimate relationships. A relationship is emphasized between expectations and how couples express their needs. For example if a male partner holds the gender related belief that women should be less emotional and more rational, he may criticize his partner when she expresses a feeling, "You women are so overly emotional!" Couples are further assisted in thinking about beliefs and expectations with a set of questions provided to them (from the Expectations Workbook in Markman et al., 1989). In a separate room, couples share with each other expectations for their relationship using the communication rules provided in the first half of the program, thus providing additional opportunity to practice the communication techniques. For homework, partners are told to set aside time during the week to continue their discussion about expectations.

Session six

Session six is divided into two parts. The first topic is sensual and sexual intimacy. The lecture starts with a discussion on cultural myths about male and female sexuality. Common myths are challenged, such as 'men always want and are ready for sex'. Further the lecture focuses on communicating about sex. Cultural taboos and feelings of vulnerability because of the importance of sexuality to how we feel about ourselves are stated as some of the reasons it is difficult for people to talk about sex. Examples are given about how we often indirectly communicate about sex, which can sometimes lead to confusion, miscommunication, not getting ones needs met, and feelings of rejection.

Couples are encouraged to talk about sex using the same communication techniques taught in this program for discussing other difficult subjects in order to create a safe environment. Couples briefly spend time with their trainer present discussing an issue related to sexual and sensual intimacy with the help of a deck of intimacy cards. Words related to sexual and sensual intimacy are on the cards and partners are instructed to choose cards that are important to them and discuss them with their partner. Lastly, home exercises for enhancing intimacy are introduced (Gottman et al., 1976; Masters & Johnson, 1971).

In the second part of the session, couples work with their trainers to put together pieces of the program that apply most to them and will be important for maintenance of program targets in the form of a contract (Stuart, 1980). Couples are given a few tips about continuing using the skills including: Take responsibility for your own communication, that is do your best to communicate effectively regardless of what your partner does. A few warnings are also given to help couples anticipate scenarios where it may be difficult to use their new skills, for example, when one partner feels overwhelmed and stressed by life events and forgets to use the new skills or when the tension is too high during a disagreement. Couples leave the program agreeing on a set of ground rules for maintaining their relationship quality and writing these down in a contract form. Each couples is given a small gift from thier trainer symbolizing their work togther (e.g., a plant as a symbol of their relationship needing daily "water and sunshine" to thrive.) (Table 8.5 gives an overview of the program elements.)

Booster session

Approximately nine months following the original intervention, couples participated in a Booster session. Usually it was possible to bring together the original training group, but for those couples that were not able to attend a group session, their original trainer contacted them and setup an individual session. In most cases, the original trainer conducted the booster session with a couple, whether in group or individual format. Further, in both formats the trainers followed a protocol and all booster sessions were tape recorded.

Couples are told that the purpose of the meeting is to "check in" with them and see how they are doing. It is stated that we are particularly interested in how they are in terms of their experience of the prevention training and application of the relevant pieces that were included in their contract. More specifically, couples are asked: what was useful when looking back on your experience with the training? What was not useful, looking back at the training? Next, the trainer reviewed the content of each original training session, asking these same questions. Lastly, couples are asked if there is anything they would like to renew or change in their contract that would be good for their relationship and if there is anything they would like to work on or would like assistance at this time from the trainer.

Table 8.5
Elements of Program

Topic	Example of session focus
Speaker and listener skills	Practice using effective communication techniques (e.g., using I statements, not blaming partner, summarizing speaker during problem discussion
Managing conflict	Identify unproductive interaction pattern (e.g., pursuit withdrawal, conflict engaging, avoidance) and plan alternative, effective strategy
Problem solving	Identify a problem and follow steps to solve it, including brainstorming, weighing pros and cons, and making a specific plan that can be carried out
Enhancing positives	Give homework assignment to do nice things for each other (e.g., give partner a massage, cook for partner, go to the film together)
Addressing underlying relationship themes	Use communication techniques to discuss themes such as closeness/distance, feeling loved and cared for, status/power, interest/responsiveness
Expectations/Assumptions/ Beliefs	Increase awareness of and challenge unrealistic relationship beliefs, discuss expectations for the relationship
Family of origin	Use genogram to identify patterns of communication and expectations/beliefs in family of origin, identify what plays a role in own relationship: how keep/change
Sensual /Sexual intimacy	Challenge myths about sex and provide educational material, assist couple in applying communication techniques to discuss intimacy, do sensate focus task
Contracting	On paper, set up ground rules for relationship, include description of 'high risk' situations and what effective strategies to apply

Issues related to targeting prevention efforts at high risk groups

Recruitment of persons at risk

In addition to nondistressed couples, 22 severely distressed couples responded to the recruitment efforts of this study, thus not qualifying for the inclusion criterion. This experience stresses the importance of embedding a primary preventive program within a more comprehensive program of a mental health clinic in which distressed couples can be offered marital therapy. This was done for the present study, resulting in perhaps early detection of distressed couples and thus making a contribution to secondary prevention by early treatment of distressed couples. The prevention trainings were held at the University of Nijmegen's Department of Psychology's outpatient clinic, and when appropriate, therapy referrals were made to this clinic. See also Chapter 4.

When is the best time to intervene with high risk groups? In the present study, couples over 18 years of age in a committed relationship for at least one year with plans for the future were selected. An alternative approach would be to intervene with younger persons before they start a long-term intimate relationship, for example, at the end of high school. Though the current intervention could be adapted to the needs of individuals in this age group and life stage, it is expected that persons already engaged in a committed intimate relationship would be more motivated.

Control sample and assessment

Given the limited but accumulating data on family of origin factors related to relationship distress and divorce in offspring (see Chapters 1, 2 and 7), the research design described in this chapter (and Chapter 4) includes an assessment of family of origin factors and further makes use of a comparison group, couples from intact families of origin. It could be argued that it is necessary to wait until enough data has accumulated on related family of origin factors, such as parental divorce, to draw empirically based conclusions as to why intergenerational transmission of divorce is occurring in families and what the implications are for tailoring a program to their needs before intervening. Though this is an empirically sound argument, we felt that the current evidence that this next generation will experience marital distress and divorce justifies evaluating a program at this time. Nonetheless, this issue is raised as a concern for researchers and clinicians who are working with risk groups based primarily

on risk indicator research. Waiting for enough data to accumulate is a valid point, but not always practical. On the other hand, intervening with a group before there is sufficient data on their risk status or the identification of relevant risk factors, may also be wasted energy.

Providing information

The third issue that we considered is of an ethical nature. What is the effect of informing an at risk population that they have an increased chance of relationship distress, separation and divorce? What is the effect of stating to a couple that certain skills are necessary for relationship success and that they may lack them? The concern, specifically, is that of a self-fulfilling prophecy. Is it so, that by informing couples of the possible negative effects of their background and their current deficits, researchers will capitalize on these negative effects? This concern was addressed in the present design by bringing to the attention of the entire sample informative material about relationships, clarifying what it means to be "at risk", and expressing the availability of staff for concerns and questions. Follow-up care was provided in the form of giving out the phone numbers of the primary investigators with the instructions to call if necessary.

Withholding intervention from persons at risk

By offering a program that has been proven effective in the general population to a high risk sample, do we have a responsibility to offer the entire sample the intervention or in any case inform the entire sample of the availability of the intervention? In the present study, we did not inform the entire sample of the intervention based on our argument that there is a strong need for a good evaluation of a randomized controlled preventive trial for couples in the Netherlands. We did not recruit directly for the preventive intervention, but rather for participation in a research study on couples communication and relationship development to control for selection bias. It is important to note here, however, that we offered severely distressed couples treatment options. Further, without a proper evaluation, distribution of the preventive intervention in the Netherlands is not justified.

Intervening with nondistressed couples

What are the potential negative effects of intervening in a relationship that is functioning well in which partners are not reporting experiencing dissatisfaction or distress? Perhaps by teaching couples to express their concerns

and dissatisfaction with their relationship, couple's idealization of their relationship may be influenced, possibly resulting in feelings of dissatisfaction. By training partners to express negative feelings, partners are likely to be more cognizant of feelings of distress. Will the intervention disturb a stable system and as a result increase rates of distress rather than the goal of decreasing distress?

Markman, Jamieson and Floyd (1983) defend this concern stating that (a) the PREP program does not negatively impact idealization; (b) the couples who have participated in the PREP program do not show negative effects on their relationship; and (c) on the contrary, couples who did not receive the PREP program demonstrated the normal deterioration in marital satisfaction that is reported in the literature. Thus, based on Markman and his colleagues experience it is expected that, although an initial decline in satisfaction may be observed, as often reported in the literature (Halhweg, Baucom &, Markman, 1988), in the long run couples will benefit from the program.

CONCLUDING REMARKS

In this chapter a primary preventive approach to relationship distress and divorce is presented. Marital distress and divorce and their consequences are recognized by the Council of Europe (1989) as a serious social and mental health problem. Preventive efforts in this area are stated as one of the priorities of the Council. In line with the Dutch prevention policy, a focus on a high risk population is taken. Based on the literature (see Chapters 2 and 7), adults who experienced parental divorce and their partners were selected as an at risk population. Many adults in the next decades will be children of divorce and, therefore, will suffer from of an increased risk of relationship problems, distress and divorce. This chapter describes the development of a preventive intervention used in a controlled evaluation with high risk couples. The presented intervention meets several requirements that have been described recently in the literature as conditions for effectiveness (Bond & Wagner, 1988; Bosma & Hosman, 1990; Price, et al., 1988). The program is based on an extensive study of risk factors, is directed at a high risk population, and in various ways responds to the specific needs of the individual couples. The presented program is aiming at improvement of both competence and intimacy in the marital (or marriage-like) relationship. The program is the result of a long history of

program development and is based on earlier experiences of colleagues with the program, which have been evaluated, improved and shown significant positive effects. Shared with the reader are the difficult issues faced related to intervening with a risk population as well as adapting a program to another culture.

Chapter 9

The prevention of relationship distress for couples at risk: A controlled evaluation with nine month and two year follow-up results

A preventive intervention was randomly offered to a group of 67 non- to mildly distressed couples who participated in a larger study on relationships. At the nine month follow-up parental divorce couples demonstrated a significant increase in problem intensity, and a trend toward decreased problem solving ability and relational efficacy, whereas couples from intact families of origin showed the opposite. At follow-up II, no significant differences were found between the two groups. At follow-up I and II, participation in the preventive intervention did not appear to have a protective influence on decline in relationship functioning for adult children of divorce and their partners.

van Widenfelt, B., Hosman, C., Schaap, C., & van der Staak, C. (submitted). The prevention of relationship distress for couples at risk: A controlled evaluation with nine month and two year follow-up results

INTRODUCTION

Given the high rates of marital distress and divorce (Centraal Bureau voor Statistiek, 1988; National Center for Health Statistics, 1990) and the severe consequences on partners and children (Bloom, Asher, & White, 1978; Emery, 1982), preventive interventions have been called for (Coie et al., 1993; Markman, Floyd, Stanley, & Storaasli, 1988). However, only a few programs have been evaluated to date and additional research is still needed before larger scale implementation can be justified.

An impressive evaluation of a preventive intervention for couples is a longitudinal study by Markman and his colleagues (Markman, 1981; Markman, Duncan, Storaasli, & Howes, 1987; Markman, Floyd, Stanley, & Lewis, 1986; Markman, et al., 1988; Markman, Renick, Floyd, Stanley, & Clements, 1993; Renick, Blumberg, & Markman, 1992). The intervention was found to have positive effects at 1 1/2, 3, 4 and 5 year follow-up assessments. At 1 1/2 and 3 year follow-up's, intervention couples had higher levels of relationship satisfaction, lower levels of problem intensity and negative communication than control couples. At the five year follow-up, intervention couples had a lower divorce rate than control couples (8% versus 19%).

Given the promising effects of Markman's intervention, replication is needed in general, as well as across cultures and groups. The present study set out to do just that. The study is similar in design and intervention to that of Markman's. As in the study by Markman, couples were not informed of the intervention during the recruitment process, in order to control for selection bias.

The present study also differs from the study of Markman in two important ways. First, in terms of culture and age (years together). The population of the current study is Dutch (vs. American) and is somewhat older (longer together) than Markman's sample. Second, the present investigation focuses on couples "at risk". Whether or not to focus on general groups of couples or specific "high risk" populations of couples when offering preventive interventions to couples has not yet been well researched, and remains an important issue in prevention science. A large body of literature on factors associated with marital distress and divorce offer a wealth of research opportunities to select high risk groups to target prevention program evaluations with (for an overview see Van

Widenfelt, Markman, Guerney, Behrens, & Hosman, in press). Thus, in contrast with Markman's study, which focused on the general population, the current study focuses on a high risk group. Parental divorce was chosen as a target risk indicator for relationship distress and divorce. The choice of parental divorce as a risk indicator among other variables is based primarily on an important study conducted in the Netherlands by Kooy (1984) who examined 12 variables and found parental divorce and mental health of spouses to be the two variables most related to future marital failure in offspring. Reports of demographic and clinical data in the US have also drawn a link between parental divorce and the marriages of offspring (e.g., Glenn & Kramer, 1987; Pope & Mueller, 1976; Wallerstein & Blakeslee, 1989). More recently Amato and Keith (1991) in a meta-analysis of the effects of parental divorce on adult offspring, concluded that a significantly negative but relatively weak effect is present (relationship quality, separation/divorce among other variables). Even if the effect is small, it still puts these couples at increased risk compared to the general population.

The proposed study is aimed at evaluating the effect of a preventive intervention designed to lower the risk for eventual relationship distress and divorce for heterosexual couples who are not yet experiencing serious relationship difficulties, but are expected to run a higher risk for such based on their family background. The preventive intervention is primarily based on PREP (Prevention and Relationship Enhancement Program), a program developed by Markman and his colleagues (Markman, Stanley, & Blumberg, 1989) and has been adapted for the Dutch population at the University of Nijmegen (Schaap & Van Widenfelt, 1990).

RESEARCH QUESTIONS AND HYPOTHESES

Couples for which one partner experienced parental divorce were compared with couples from intact families of origin. It was hypothesized that the couples who experienced parental divorce were at increased risk for relationship distress by not having learned the necessary skills for maintaining relationship quality and stability from their parents, thereby putting them at risk for relationship distress and eventual break up. By learning the necessary skills for maintaining a healthy relationship through participation in a preventive intervention, couples were expected to be more equipped in preventing relationship discord and dissolution.

(1) *Research Question:* Can a couples likelihood for relationship distress, dysfunction and divorce be reduced with a six session intervention?
(H1) Control couples will show a greater decline in relationship satisfaction, lower relational efficacy, poorer conflict management skills and have higher rates of break up at follow-up than couples who participate in the intervention.
(H2) These rates of decline and break up will be strongest for couples in which one partner is identified as having a high risk family of origin (divorced parents) and who do not participate in the intervention.

To better understand the importance of family of origin experiences on later relationship functioning, exploratory analyses are also conducted on other aspects of family origin that may put a couple at increased risk for a decline in relationship quality or break up.

METHOD

Recruitment

Couples were recruited through media advertisements, brochures and posters for participation in a longitudinal study on family of origin, communication and relationship development. Couples were not told about the possibility of being offered an intervention during recruitment. To take part in the study, couples were required to have had a commitment to their relationship of at least one year and have plans for a future together. To reward subjects for their participation, a book on relationships written by one of the co-authors was given upon completion of the first assessment, which took approximately three hours.

Procedure

The first assessment began with the partners completing an informed consent form at which time the interviewer explained the procedure of the study and the possible risks involved as well as answered any questions the couples had at that time. Couples were also informed about the longitudinal plans of the study. Partners separately completed a set of questionnaires and were videotaped during two discussions. Nine months (FU I) and two years (FU II) later, couples were sent a set of questionnaires to be filled in separately and returned by mail. (For more details see Chapter 4 as well as Figure 4.2 for an overview of the design.)

Subjects

Sixty seven of the 89 couples who completed the first assessment were selected for participation in the prevention study. The twenty-two couples that were excluded were severely distressed based on their scores on the MMQ relationship satisfaction subscale (see Measures) and/or because they asked for an intervention and therefore were not included. The remaining 67 non- to mildly distressed couples that participated came from two medium size cities in the Netherlands. Forty-three percent of the couples were married, 37% were cohabiting and 19% lived apart. The mean number of years together was 7 (SD = 6, range = 1-30). Thirty-four percent of the couples had children. Mean age for males was 36 (SD = 10, range = 20-63); mean age for females was 33 (SD = 8, range = 19-53). Fifty-one percent of the males had a religious affiliation as well as 52% of the women, the rest of the subjects had no religious affiliation. Twenty-eight percent of the males had a university education as well as 21% of the females. For demographics of the sample, see Table 9.1.

Table 9.1
Demographic characteristics of intervention, control and decline couples at Time 1 (N = 67)

	All (N=67)		Intervention (n=24)		Control (n=27)		Decline (n=16)	
Children (n, %)	23 (34%)		9 (38%)		12 (44%)		2 (13%)	
Marital status (%)								
married	43		29		63		31	
cohabitating	37		42		30		50	
LAT	19		29		7		19	
nr. years together								
($\bar{x}$, sd)	7 (6)		6 (5)		9 (8)		4 (3)	
range	1-29		1-18		1-29		1-8	
	males	females	males	females	males	females	males	females
age (years) $\bar{x}$ (sd)	36 (10)	33 (8)	35 (10)	33 (7)	40 (10)	35 (9)	30 (7)	28 (5)
range	20-63	19-53	20-59	20-49	21-63	19-53	21-48	19-39
religion(%)								
Catholic	39	43	25	42	37	48	56	31
Protestant	9	6	8	0	11	15	6	0
other	3	3	4	4	4	0	6	13
none	49	48	63	54	48	37	31	56
education (%)								
lementary	5	2	0	0	0	0	2	0
high school and higher educ	67	77	58	79	78	85	72	81
university	28	21	42	21	22	15	26	19

Assignment to Intervention, Control and Decline Condition

With the aim that the control and intervention condition would be roughly the same size, more than half of the 67 couples (60%; n =40) were randomly offered the intervention, with the expectation of a decline condition. Of the 40 couples that were offered the preventive intervention, 60% of the couples completed the intervention (n=24), 35% declined participation in the intervention (n=14) and 5% dropped out of the intervention by session 2 (n=2). This rate of participation is similar to, yet a little higher than, that of Markman et al. (1988), who used a similar recruitment strategy for which 40 percent of couples originally offered the intervention, completed the intervention. See Table 9.2 for the distribution of couples across cells.

Table 9.2
Number of couples in each condition at Time 1, 2, and 3 with and without parental divorce

	intervention	control	decline	total
parental divorce				
T1	10	10	7	27
T2	8	10	5	23
T3	6	5	3	14
T3 (2 groups)	6	5		11
no parental divorce				
T1	14	17	9	40
T2	11	13	5	29
T3	10	8	3	21
T3 (2 groups)	10	8		18
total group				
T1	24	27	16	67
T2	19	23	10	52
T3	16	13	6	35
T3 (2 groups)	16	13		29

Differences at Time 1 on Demographic Variables

On demographic variables at Time 1 for both males and females, intervention, control and decline couples did not differ significantly on age of males and females, nor in marital status (married, living together or living apart), or number of children. Non- and mildly distressed couples were evenly distributed across the three conditions.

Number of years together, however, was significantly different between conditions at Time 1 [F (2,66) =9.06, p < 001]. Mean number of years together for intervention, control and decline couples was 9.1, 6.3, and 3.9, respectively. Number of years together was not found to be significantly related to any self-report relationship variables.

Since in the Netherlands many couples do not marry or plan to and are nevertheless highly committed to each other, they were included in the present study if they met the criteria "plans for a future together". Because this differs in the United States, additional analyses were done comparing couples on marital status (married, living together, living apart). The groups differed significantly in age and number of years together, but did not differ significantly on other demographic variables nor self-report relationship variables.

Measures

Personal History Questionnaire (PHQ; Van Widenfelt, Schaap, & Verdellen, 1990). The PHQ was used gather relevant background information. A range of questions were included about the subject, including occupation, education, income and religion. Subjects were also asked about their family of origin: if their parents were divorced, if either parent had a psychiatric history, and if either parent died during their childhood. Finally, subjects were asked to rate their parent's marital quality on a scale of 1-7 during their childhood (through age 12) and during their adolescence (age 12 - 18), and to rate on a 1-5 scale the quality of their relationship with their parents during childhood.

Maudsley Marital Questionnaire (MMQ; Cobb, McDonald, Marks, & Stern, 1980; Arrindell, Boelens, & Lambert, 1983). The MMQ is made up of three subscales: relationship, sexual and general life satisfaction. Arrindell et al. (1983) have validated the questionnaire for the Dutch population. In the current study, Chronbach alphas on the relationship satisfaction scale are a = .93 and a = .93 for males and females respectively (N=89), for the sexual satisfaction subscale a = .86 and a = .79 for males and females respectively (N=89), and general life satisfaction subscale a = .57 and a = .66 for males and females respectively (N=89).

Conflict Tactics Scale (CTS; Straus, 1979). This questionnaire measures three forms of relationship conflict tactics. For the current analyses, the verbal and physical aggression subscales (reported by self) were used. The questionnaire has a long history of use and has been reported to be reliable and valid. It was translated into Dutch for use in the current study. Chronbach alphas in the

present study for the verbal aggression scale are a = .72 and a = .82 for males and females respectively (N=89) and a = .58 and a = .78 for physical aggression, males and females respectively (N=89) .

Interactional Problem Solving Inventory (IPSI; Lange, 1983; Lange, Markus, Hageman, & Hanewald, 1991). The IPSI, a 17 item Dutch scale, was used to measure problem solving ability. The reliability and validity of the IPSI are reported to be satisfactory. For the present sample, Chronbach alphas for males and females were a = .92 and a = .93, respectively (N=89).

Marital Agendas Protocol (MAP; Notarius & Vanzetti, 1983). This questionnaire has four parts. Two parts were used in the present study to assess problem intensity and relational efficacy. For problem intensity, subjects were asked to rate twelve problem areas on a scale of 1-100. For assessing relational efficacy, subjects were asked to rate how many out of ten discussions for twelve problem areas he or she believes will be resolved by the couple to their mutual satisfaction. In a series of studies the measure has been found to be reliable and valid. The measure was translated into Dutch for use in the present study (Van Widenfelt & Schaap, 1990). In the current study, Chronbach alphas for males and females were a = .82 and a = .81, respectively (N=89) for relational efficacy and a = .75 and a = .80 for problem intensity, males and females respectively (N=89).

Hopkins Symptom Checklist (SCL-90; Derogatis, 1977; Arrindell & Ettema, 1986). The SCL-90 is the most popular instrument for measuring psychological adjustment or health symptoms. It has excellent psychometric properties. The SCL-90 was translated and validated for the Dutch population by Arrindell and Ettema (1986). In our sample the total score of the SCL proved to be very reliable (Chronbach's alphas for males and females were a = .97 and a = .98 respectively, N = 89).

Family Environment Scale (FES; Moos & Moos, 1981). The FES is a scale made up of 99 items about how a family member experiences and views their family. There are 11 items for each of the nine categories. Each item is answered with "yes" or "no". The scale has been translated for the Dutch population by de Coole and Jansma (1983), who have also done the work on norms, reliability and validity for the Netherlands with mixed results. In the present study instructions were given to each partner to rate their family of origin during childhood (through age 18) using the scale. For the current study the conflict subscale was used which consists of 11 items, such as, "We fight a lot in our family", "Family members often criticize each other", "Family members sometimes hit each

other". For the conflict subscale, KR 20 = .59 and .63 for males and females respectively (n=56).

Differences at Time 1 on self-report measures

At Time 1, overall there were no significant differences between the three conditions (Intervention, Control and Decline) or between males and females on the self-report relationship variables: relationship (dis)satisfaction, problem solving ability, problem intensity, relational efficacy, and physical aggression. The exception was for sexual (dis)satisfaction, revealing a significant difference between conditions [$F(2,66)=3.20$, $p=.05$) and for verbal aggression, revealing a gender difference [$F(2,66)=30.31$, $p<.001$]. Inspection of mean scores revealed that the decline condition had significantly lower scores on sexual dissatisfaction (thus reported to be more sexually satisfied) and females had higher scores for verbal aggression (see Table 9.3). For individual variables, there were no significant differences in general life (dis)satisfaction between conditions nor between males and females. There was a significant difference between conditions on health symptoms [$F(2,66)=5.37$, $p=.007$], the decline condition being somewhat less healthy.

No significant differences were found between the three conditions on retrospective reports of seven family background variables: parental divorce, parental death, perceived parental psychopathology, perceived parental marital quality during childhood and adolescence, perceived quality of relationship with parents during childhood and perceived level of conflict in family during childhood.

Intervention

The intervention consisted of six two and half hour sessions. The focus of the sessions were as follows: (1) speaking and listening skills, (2) expressing negative feelings and managing conflict, (3) problem-solving and hidden agendas, (4) family of origin, (5) expectations and relationship beliefs, (6) sexuality and making a ground rules contract. Each couple worked with their own personal trainer throughout the six sessions. Sessions began with instructions given in a group setting, followed by practicing the skills alone with a personal trainer. Couples received continuous feedback from trainers and were required to practice at home as well. The total intervention period was a mean of seven weeks, as a week free was usually scheduled during the middle of the training to

accommodate schedules of trainers and couples. (For more details on the intervention, see Chapter 8.)

Trainers were Master's level Clinical Psychology students with some prior clinical experience. Trainers went through a training program of 60 hours and were supervised throughout the duration of the program implementation. They were instructed to closely follow a detailed manual (Schaap & Van Widenfelt, 1990).

Intervention Drop-outs

Two couples dropped out of the intervention by Session 2. The reason given by one couple was that they had a conflict before the second session and as a result they did not show up for the session, nor call. Though contact was made with them they decided it was better for them not to continue during such a difficult period. The second couple stopped because the program conflicted with their religious beliefs. They said they were "spoken to" through a bible verse to no longer participate in a secular program. Though additional bible verses in support of the program from Markman, Blumberg, and Stanley (1991) were presented to them, as well as arguments of the importance of the program in the Christian community, they were not persuaded to continue. They also passingly shared that they had a conflict after the first session.

Follow-up I (FU I)(Time 2)

Couples were assessed at approximately nine months after Time 1 (approximately six months after the intervention). Questionnaires were sent to all 67 couples. At FU I, twelve (18%) couples refused to participate in the assessment. Data were collected on 55 (82%) of the 67 couples. Two couples (3%) had broken up, resulting in questionnaires received from 53 intact couples (79%). See Table 9.2 for designation of cells.

Booster Session

At one year after Time 1 (approximately nine months following the completion of the intervention), intervention couples were invited to participate in a booster session. A trainer reviewed the original six sessions of the intervention with the couple and asked what the couple needed help with as well as if there were aspects of their contract they wanted to renew. Twenty of the original 24 intervention couples (83%) participated in the booster session.

Follow-up II (FU II)(Time 3)

Couples were again assessed two years after Time 1 (approximately 1 year and 9 months after completing the intervention). Couples were sent a letter to request their participation. Thirty-eight couples of the original 67 responded (57%). Three additional couples had broken up by then, resulting in the completion of questionnaires by 35 (52%) intact couples of the 67 original couples. Thus, by FU II, five couples had broken up (7%) and 27 couples (40%) refused further participation in the study. See Table 9.2 for designation of cells. Couples who did not complete the FU I or FU II assessment were compared with those who completed the FU assessments. The two groups did not differ on demographic variables, however, on self-report relationship variables there was a consistent trend that non-completers were slightly more negative.

RESULTS

Relationship Stability at FU I

At FU I, two couples (8%) that participated in the intervention broke up; none in the control condition. Interestingly, the two couples that broke up did so within weeks after completing the program. One woman stated, "we realized just *how* bad our communication actually was". The second woman commented that this was her last hope that things would change and she finally accepted that they would not.

Overall Functioning for all Couples at FU I

Repeated Measures ANOVA's (2x3x2 factorial design) were conducted on seven self-report relationship variables. Planned comparisons were conducted contrasting the Intervention condition with the Control and Decline conditions. Gender (Male and Female) and Time (1 and 2) were within subject factors, and Condition (Intervention, Control, and Decline) was a between subject factor. Gender was included in the design to account for the fact that each couple yielded two scores, one from the male and one from the female. Since both scores are (statistically and conceptually) interdependent, effects of the factor gender are not reported on and the couple is regarded as the unit of analysis.

Table 9.3 presents the mean scores for males and females in the three conditions at Time 1 and Time 2; Table 9.4 present the results of the ANOVA with planned comparisons. Overall, the results do not reveal the predicted

Table 9.3
Means and standard deviations by condition, gender and time (1 and 2) of variables

	Males				Females			
	Time 1 (n=67)		Time 2 (n=52)		Time 1 (n=67)		Time 2 (n=52)	
	M	SD	M	SD	M	SD	M	SD
				Intervention condition				
Variable								
Relationship (dis)satisfaction	13.1	10.8	17.7	15.3	13.1	10.3	16.3	14.6
Sexual (dis)satisfaction	10.4	9.5	13.9	9.8	11.6	6.9	14.1	10.2
Problem solving ability	66.5	10.3	66.0	12.2	68.8	10.3	66.9	13.0
Problem intensity	132.5	81.9	180.8	149.2	156.6	80.3	187.4	150.0
Relational efficacy	103.0	11.8	101.6	17.5	102.2	9.4	101.7	12.3
Verbal aggression	11.8	4.2	13.1	5.9	15.4	6.7	15.1	7.5
Physical aggression	12.0	1.6	11.7	1.0	12.4	2.1	12.3	3.1
Health symptoms (SCL-90)	118.6	24.0	124.2	36.5	115.9	16.8	121.9	19.1
Generallife (dis)satisfaction	9.2	5.1	10.4	7.0	9.2	5.3	13.0	6.5
				Control condition				
Relationship (dis)satisfaction	11.7	8.7	15.1	12.1	15.0	11.7	15.3	13.8
Sexual (dis)satisfaction	10.2	7.8	11.3	9.0	10.0	7.0	11.4	8.6
Problem solving ability	68.7	8.6	69.1	9.3	68.8	8.8	68.9	9.2
Problem intensity	176.7	111.1	132.4	103.3	191.4	153.4	170.0	145.4
Relational efficacy	98.4	15.6	100.2	23.2	101.4	13.5	96.4	25.1
Verbal aggression	11.4	5.7	12.4	5.8	16.5	8.4	16.0	8.9
Physical aggression	12.6	2.3	12.5	2.6	15.0	6.5	13.8	5.0
Health symptoms (SCL-90)	114.3	19.9	114.4	18.5	127.6	29.3	119.4	24.9
Generallife (dis)satisfaction	7.9	3.0	9.2	5.4	9.6	3.8	9.7	4.4
				Decline condition				
Relationship (dis)satisfaction	7.9	5.9	10.1	6.8	9.0	5.1	12.2	7.0
Sexual (dis)satisfaction	5.2	4.7	6.2	4.2	4.6	4.2	6.2	5.9
Problem solving ability	67.8	11.2	66.7	8.4	73.7	6.3	72.8	6.6
Problem intensity	200.0	136.0	178.3	148.8	175.8	131.8	158.3	85.6
Relational efficacy	100.7	12.0	97.6	17.7	102.4	10.0	101.0	12.1
Verbal aggression	11.7	2.0	13.4	4.4	15.7	3.6	16.8	4.0
Physical aggression	13.04	2.6	11.4	0.8	11.6	1.2	12.5	2.9
Health symptoms (SCL-90)	120.1	19.9	126.4	32.9	144.8	40.9	135.8	46.8
Generallife (dis)satisfaction	10.9	4.7	10.1	3.7	10.1	4.1	9.6	6.2

interaction between Condition and Time on relationship variables, that would have indicated a difference between the conditions in decline of relationship quality over time. Only for problem intensity was there an interaction between Condition and Time when the intervention and control condition were compared: problem intensity increased in the intervention condition and decreased in the control condition. The latter runs contrary to what was expected. There were several main effects. Relationship (dis)satisfaction and sexual (dis)satisfaction increased over time, that is the entire group of couples became more distressed over time. There was also a main effect for sexual (dis)satisfaction between the intervention and decline condition, with the couples who were assigned to the intervention condition reporting higher rates of sexual (dis)satisfaction than couples that refused the intervention and were therefore in the decline condition. Though gender is not reported on, the reader may be interested to know that few gender differences were found when testing for significance.

Table 9.4
Results of the repeated measures ANOVA's with planned comparisons: main effects for condition and time (Time 1 and 2), and interaction between condition comparisons and time

	Time F (1,45)	Int vs Ctrl F (1,45)	Int vs Decl F (1,45)	Time x Int vs Ctrl F (1,45)	Time x Int vs Dcll F (1,45)
Relationship (dis)satisfaction	7.70**	0.06	1.61	0.94	0.21
Sexual (dis)satisfaction	6.33*	0.61	5.63*	1.24	0.73
Problem solving ability	0.67	0.45	0.84	0.67	0.79
Problem intensity	0.10	0.01	0.10	6.54*	2.67
Relational efficacy	1.04	0.49	0.08	0.00	0.03
Verbal aggression	2.54‡	0.02	0.06	0.06	0.74
Physical aggression	2.15	2.77	0.00	0.94	0.21
Health symptoms (SCL-90)	0.00	0.04	2.00	4.76*	1.54
General life (dis)satisfaction	3.17‡	1.43	0.02	2.54	4.53*

**p<.001 *p<.05 ‡p<.10

It is also interesting to note that for individual well-being the pattern of data appeared consistent with relationship well-being: planned comparisons revealed a difference between intervention and control couples on health symptoms (SCL-90), with intervention couples reporting an increase in health symptoms and controls a decrease. Intervention and decline couples also appeared to differ on general life (dis)satisfaction, with intervention couples demonstrating an increase in dissatisfaction with life in general and decline couples showing a slight decrease in dissatisfaction.

Overall Functioning of Couples with Parental Divorce at FU I

Next, another factor was added to the design: parental divorce, resulting in a 2x2x3x2 factorial design. Couples for which one partner experienced parental divorce were compared with couples from intact families of origin. (See Table 9.2 for designation to cells.) Again repeated measures ANOVA's were conducted with planned comparisons contrasting the intervention with the control and decline conditions. Table 9.5 presents the mean scores for the groups and conditions and Table 9.6 presents the F-values for the relevant main and interaction effects in the factorial design. Inspection of Table 9.6 indicates that there were several significant differences and trends for the interaction of parental divorce and time, indicating that decline of relationship quality follows a different pattern over time for the two groups. Problem intensity increased over time for couples with parental divorce, and decreased for those without parental divorce, which is in support of the hypotheses. In addition, there was a trend for problem solving ability and relational efficacy to decrease over time for couples with parental divorce, whereas couples without parental divorce increased. Furthermore, symptoms on the SCL-90 decreased over time for couples without parental divorce, and remained stable or increased somewhat for those with parental divorce. The factor condition, however, yielded no significant results. Thus, the intervention does not appear to have any protective influence in this time frame, in view of the lack of a significant interaction of time, condition and parental divorce. As indicated above, few gender differences were found and are not reported on.

Table 9 5
Means and standard deviations of self-report relationship variables for intervention, control and decline couples with and without parental divorce at Time 1 and 2 reported by males and females

	with PD				Intervention		without PD	
	Time 1		Time 2		Time 1		Time 2	
variable females	M	SD	M	SD	M	SD	M	SD
relationship	14.5	(11 1)	20 0	(19 0)	11.9	(11 1)	16 0	(12 5)
(dis)satisfaction	12.3	(8 3)	15.5	(13 5)	13 7	(12 0)	16.9	(16 1)
sexual	10 8	(9 6)	16 6	(10 2)	10 1	(9 9)	11.8	(9 3)
(dis)satisfaction	12.3	(6 8)	14.3	(8 9)	11 0	(7 3)	14 0	(11 6)
problem solving	67 6	(6 6)	65 6	(11 8)	65 6	(12 8)	66.3	(13 0)
ability	68 6	(12 8)	67 8	(12 8)	68 9	(8 5)	66 1	(13 7)
problem intensity	115 6	(68 6)	208 3	(179 0)	147 6	(93 1)	156 0	(120 9)
	162 7	(91 3)	207 8	(175 7)	151 2	(73.5)	169 0	(129 5)
relational efficacy	105 2	(8 2)	98 1	(21 5)	101 0	(14 4)	102 8	(13 6)
	102 9	(12 9)	101 4	(15 0)	101 6	(5 3)	102 0	(10 0)
verbal aggression	11 9	(2 0)	13 0	(5 1)	11 8	(5 5)	13.2	(6 7)
	16.3	(7 7)	15 9	(8 5)	14 8	(6 1)	14 4	(7 0)
physical aggression	12.4	(1 8)	11 7	(0 8)	11 7	(1 4)	11 6	(1 1)
	12.1	(1 2)	12 6	(3 8)	12 7	(2 7)	12.5	(2 7)
health symptoms	117 5	(22 5)	134 3	(50 7)	119.5	(26 3)	116 2	(18 8)
	113 6	(15 6)	123 4	(21 4)	117 7	(18 4)	120 7	(18 1)
general life	8 8	(3 0)	9 3	(8 5))	9 6	(6 5)	11.3	(5 8)
(dis)satisfaction	10 6	(7 2)	14 4	(9 1)	8 1	(3 0)	11 8	(3 4)
				Control condition				
relationship	10 6	(7 3)	15.8	(13 4)	12 6	(9 6)	14 7	(11 6)
(dis)satisfaction	15 1	(11 5)	17.3	(11 4)	14.8	(12 4)	13 8	(15 7)
sexual	10.8	(6 6)	12 1	(8 9)	9 7	(8 8)	10 7	(9 5)
(dis)satisfaction	10 6	(5 9)	13 4	(9 1)	9 5	(7 9)	9 9	(8 3)
problem solving	71 8	(5 3)	69 0	(8 2)	66.3	(10 1)	69.3	(10 4)
ability	69 9	(10 4)	67 1	(10 1)	68 0	(7 8)	70.2	(8 8)
problem intensity	139 0	(84 7)	130 0	(113 8)	205 0	(123 3)	134 3	(99 9)
	147 1	(128 1)	145 1	(130 7)	224 6	(167 4)	188 8	(158 5)
relational efficacy	101 0	(16 2)	99.3	(34 1)	96 7	(15 7)	100 8	(13 7)
	105 1	(10 7)	90 1	(33 5)	98 9	(15 0)	100 7	(18 0)
verbal aggression	9 7	(4 1)	11 7	(5 4)	12 8	(6 5)	13 0	(6 3)
	14 7	(8 4)	14.2	(8 8)	17.9	(8 5)	17.3	(9 2)
physical aggression	12.8	(2 5)	13 1	(3 0)	12 4	(2 3)	12 1	(2 3)
	13 5	(3 6)	12.3	(2 8)	16 1	(8 0)	14.9	(6 0)
health symptoms	106 7	(14 4)	104 8	(12 1)	120 1	(22 3)	121 6	(19 6)
	117 4	(19 8)	112 6	(11 8)	135 3	(33 6)	124 5	(30 9)
general life	7 8	(1 5)	10 1	(5 5)	7 9	(3 8)	8 6	(5 4)
(dis)satisfaction	9 3	(3 1)	10 6	(3 7)	9 8	(4 4)	9 1	(4 9)
				Decline condition				
relationship	7 6	(7 8)	8 6	(7 4)	8 3	(3 2)	12 0	(6 6)
(dis)satisfaction	7 2	(4 1)	12 0	(8 0)	11.3	(5 9)	12.5	(6 8)
sexual	6 0	(6 3)	6 4	(5 3)	4.3	(1 7)	6 0	(2 9)
(dis)satisfaction	5 4	(5 0)	6 6	(7 8)	3 5	(3 1)	5 8	(3 2)
problem solving	73 6	(9 8)	70 8	(7 7)	60.5	(8 9)	61.5	(6 6)
ability	75 4	(8 1)	73 8	(7 0)	71.5	(2 6)	71.5	(6 8)
problem intensity	141 0	(90 6)	155 0	(142 9)	273 8	(159 1)	207 5	(172 7)
	137 4	(76 1)	160 0	(94 8)	223 8	(181 9)	156 3	(86 9)
relational efficacy	104 5	(10 0)	99 9	(22.2)	96 0	(14 1)	94 8	(12 6)
	106 8	(7 2)	104 6	(8 7)	96 9	(11 1)	96 4	(15 4)
verbal aggression	11 2	(2 3)	12 0	(4 9)	12.3	(1 7)	15.3	(3 4)
	14 6	(3 2)	15.2	(2 6)	17 0	(4 0)	18 8	(9 0)
physical aggression	14 3	(2 8)	11 0	(0 0)	11.5	(1 0)	11 8	(1 0)
	11 0	(0 0)	11 6	(0 9)	12.3	(1 5)	13.5	(4 3)
health symptoms	117 4	(17 7)	138 3	(39 7)	123.5	(24 7)	111 5	(16 0)
	124 4	(20 4)	116 0	(15 8)	170.3	(48 3)	160 5	(63 7)
general life	13 2	(5 1)	12 6	(2 6)	8 0	(2 3)	8 0	(3 4)
(dis)satisfaction	10 0	(4 3)	9 4	(3 2)	10.2	(4 5)	9 8	(9 5)

Table 9.6
Results of the repeated measures ANOVA's with planned comparisons: main effects for parental divorce (Time 1 and 2), and interaction between parental divorce (Pardiv) and the other factors (condition comparisons and time)

	Parental divorce F (1,42)	Parental divorce x Int. vs Ctrl F (1,42)	Parental divorce x Int vs. Decl F (1,42)	Parental divorce x Time F (1,42)	Pardiv x Time x Int. vs Ctrl F (1,42)	Pardiv x Time x Int. vs Ctrl F (1,42)
Relationship (dis)satisfaction	0.00	0.00	0.13	0.47	0.45	0.00
Sexual (dis)satisfaction	0.21	0.01	0.04	0.10	0.01	0.41
Problem solving ability	1.33	0.00	0.84	3.35‡	2.59	0.35
Problem intensity	0.86	0.88	0.86	5.49*	0.01	0.16
Relational efficacy	0.45	0.00	0.60	3.56‡	0.64	0.10
Verbal aggression	0.75	0.93	0.51	0.03	0.39	0.33
Physical aggression	0.35	0.67	0.09	1.35	0.13	2.52
Health symptoms (SCL-90)	1.87	1.99	1.37	6.39*	1.24	0.17
General life (dis)satisfaction	1.17	0.02	0.44	0.02	1.55	0.00

** $p < .001$
* $p < .05$
‡ $p < .10$

Relationship Stability at FU II

By FU II, 5 of the original 67 couples (8%) had broken up: 3 couples (13%) that participated in the intervention had broken up and 2 couples in the control condition (7%). (Note, due to the decreased sample size at FU II (n=35), especially in the decline condition (n=6), the intervention condition was only compared with the control condition and the decline condition was dropped out of the analyses. (See Table 9.2 for distribution of couples across cells.)

Overall Functioning for all Couples at FU II

Repeated Measures ANOVA's were conducted on nine self-report variables, resulting in a 2x2x2 factorial design. Again, Gender (Male and Female) and Time (1 and 3) were within subject factors and Condition (Intervention and Control) was a between subject factor. Results revealed no statistically significant

Table 9.7
Means and standard deviations of variables by condition, gender and time

Variable	Time 1 M	Time 1 SD	Time 3 M	Time 3 SD
	Intervention condition			
Male partners				
Relationship (dis)satisfaction	14.4	12.1	14.7	12.4
Sexual (dis)satisfaction	9.7	9.1	10.1	8.5
Problem solving ability	64.3	10.5	66.9	10.5
Problem intensity	145.2	98.9	151.3	131.5
Relational efficacy	101.6	13.7	103.6	14.4
Verbal aggression	12.6	4.3	12.1	4.8
Physical aggression	12.1	1.6	11.8	1.2
Health symptoms (SCL-90)	118.5	25.4	122.5	32.4
Generallife (dis)satisfaction	8.7	4.8	10.4	6.0
Female partners				
Relationship (dis)satisfaction	14.3	10.6	17.1	11.6
Sexual (dis)satisfaction	10.2	5.4	13.2	8.1
Problem solving ability	66.1	11.9	69.7	8.7
Problem intensity	181.9	115.0	130.7	104.0
Relational efficacy	98.3	15.4	100.8	15.9
Verbal aggression	14.8	5.7	13.1	4.7
Physical aggression	12.4	2.3	11.9	2.0
Health symptoms (SCL-90)	114.8	16.6	116.3	24.1
Generallife (dis)satisfaction	10.3	6.3	11.7	5.6
	Control condition			
Male partners				
Relationship (dis)satisfaction	12.3	9.3	13.2	11.9
Sexual (dis)satisfaction	9.6	7.3	9.5	5.4
Problem solving ability	69.2	8.5	69.9	7.5
Problem intensity	132.6	88.4	118.3	126.3
Relational efficacy	100.5	17.0	100.5	16.0
Verbal aggression	10.2	3.7	10.5	5.7
Physical aggression	11.8	1.1	11.6	1.3
Health symptoms (SCL-90)	111.2	21.1	115.9	23.5
Generallife (dis)satisfaction	7.5	3.4	10.3	4.9
Female partners				
Relationship (dis)satisfaction	12.4	10.8	10.5	9.0
Sexual (dis)satisfaction	7.8	4.6	8.2	5.2
Problem solving ability	69.6	8.8	73.0	7.7
Problem intensity	121.6	98.6	94.3	101.4
Relational efficacy	102.6	12.0	103.4	17.8
Verbal aggression	14.9	7.4	14.3	7.1
Physical aggression	14.1	5.8	11.9	1.6
Health symptoms (SCL-90)	121.2	25.1	117.6	20.3
Generallife (dis)satisfaction	8.9	4.2	9.4	4.6

Table 9.8
Results of the repeated measures ANOVA's: main effects for condition and time (Time 1, 3), interaction between condition and time

	Time F (1,27)	Condition F (1,27)	Time x Condit. F (1,27)
Relationship (dis)satisfaction	0.12	0.68	0.43
Sexual (dis)satisfaction	0.68	0.87	0.45
Problem solving ability	5.21*	1.51	0.22
Problem intensity	1.66	1.10	0.00
Relational efficacy	0.38	0.02	0.18
Verbal aggression	1.30	0.16	0.73
Physical aggression	5.49*	0.39	1.61
Health symptoms (SCL-90)	0.39	0.05	0.17
General life (dis)satisfaction	4.62*	0.73	0.00

** p<.001 * p<.05 ‡ p<.10

difference over time between those who participated in the intervention and those who did not on all variables at FU II. Thus, the hypothesis was not confirmed. A main effect of Time was found for general life (dis)satisfaction, problem solving ability and physical aggression. That is, problem solving ability increased and physical aggression decreased, whereas dissatisfaction with life in general increased over time for all couples, regardless of condition. See Tables 9.7 and 9.8.

Relationship Satisfaction and Functioning for Couples with Parental divorce at FU II

Next, another factor was added to the design: parental divorce, resulting in a 2x2x2x2 factorial design. Couples for which one partner experienced parental divorce were compared with couples from intact families of origin. Results reveal no statistically significant differences between intervention and control couples, nor between parental divorce and intact family couples from Time 1 to Time 3 across the same set of nine self-report variables. There were no statistically significant interaction effects. Thus, the hypothesis was not confirmed. See Tables 9.9 and 9.10.

Table 9.9
Means and standard deviations of variables for male and female partners with and without parental divorce at T 1, 2 and 3

Variable	Time 1 M	Time 1 SD	Time 2 M	Time 2 SD	Time 3 M	Time 3 SD
			Parental Divorce group			
Male partners						
Relationship dissatisfaction	12.3	9.1	16.4	13.8	12.4	7.8
Sexual dissatisfaction	10.7	9.0	10.7	7.9	9.2	4.8
Problem solving ability	68.1	6.0	68.5	7.6	69.3	7.2
Problem intensity	128.5	67.6	169.6	168.3	151.3	120.3
Relational efficacy	103.5	11.0	95.4	31.2	103.5	10.4
Verbal aggression	11.3	2.7	11.3	4.5	11.8	3.2
Physical aggression	13.0	2.6	12.0	2.5	12.2	1.5
Health symptoms (SCL-90)	115.1	20.3	128.8	46.6	121.1	31.6
General life dissatisfaction	9 6	3.9	11.5	7.0	12.6	6.8
Female partners						
Relationship dissatisfaction	11.7	8.3	14.9	10.1	14.1	9.4
Sexual dissatisfaction	9.2	4.1	9.8	4.7	9.5	3.5
Problem solving ability	70.5	10.3	67.3	8.7	71.3	8.1
Problem intensity	161.6	90.3	177.2	151.4	120.5	79.7
Relational efficacy	103.8	11.7	100.6	14.2	103.1	13.3
Verbal aggression	13.5	4.2	14.2	5.3	14.6	5.3
Physical aggression	12.2	2.3	11.4	0.7	11.6	1.2
Health symptoms (SCL-90)	116.3	19.0	115.4	13.7	115.0	19.1
General life dissatisfaction	10.2	5.5	12 7	6.8	11.5	5.5
			No Parental Divorce group			
Male partners						
Relationship dissatisfaction	11.3	10.2	14.5	12.0	14.2	13.4
Sexual dissatisfaction	7.7	7.3	9.4	7.9	10.4	8.0
Problem solving ability	65.8	11.1	67.7	11.3	67.1	10.0
Problem intensity	164.5	122.3	135.3	113.4	152.6	147.8
Relational efficacy	98.9	15.8	101.4	14.4	98.3	19.2
Verbal aggression	11.3	4.5	12.7	5.4	11.8	5.9
Physical aggression	11.9	1.6	11.6	1.0	11.5	1.0
Health symptoms (SCL-90)	118.2	25.9	117.2	20.1	115.7	23.7
General life dissatisfaction	8.0	4.8	9.2	5.0	9.7	5.4
Female partners						
Relationship dissatisfaction	11.1	9.8	12.8	13.3	12.9	11.2
Sexual dissatisfaction	7.0	6.0	8.9	7.7	10.7	9.2
Problem solving ability	69.2	7.7	70.3	9.7	71.2	8.5
Problem intensity	157.2	116.9	148.5	137.6	106.5	113.5
Relational efficacy	100.4	9.6	101.7	15.7	103.4	17.1
Verbal aggression	15.3	7.2	14.3	7.0	13.2	6.5
Physical aggression	13.2	4.9	13.3	4.7	12.0	2.0
Health symptoms (SCL-90)	125.1	25.1	124.6	26.4	117.9	20.5
General life dissatisfaction	8.1	3.7	9.8	5.2	10.1	5.4

Table 9.10
Results of the repeated measures ANOVA's: main effect for parental divorce (Time 1, 3), and interaction between parental divorce (Pardiv) and the other factors

	Parental divorce F (1,26)	Parental divorce x Cond F (1,26)	Parental divorce x Time F (1,26)	Pardiv x Time x Cond. F (1,26)
Relationship (dis)satisfaction	0.22	0.00	0.69	0.18
Sexual (dis)satisfaction	0.00	3.72‡	2.60	0.18
Problem solving ability	0.58	0.13	0.03	1.17
Problem intensity	0.13	0.00	0.16	0.08
Relational efficacy	0.84	0.01	0.33	0.70
Verbal aggression	0.05	0.07	1.16	0.00
Physical aggression	0.00	0.06	0.02	0.82
Health symptoms (SCL-90)	0.00	0.42	0.49	0.01
Generallife (dis)satisfaction	0.12	0.07	0.18	0.37

** $p < .001$
* $p < .05$
‡ $p < .10$

Family of Origin Variables and Decline in Relationship Quality over Time

Since there was only partial support for the hypotheses in regard to parental divorce, the question remained, are there other aspects of family of origin experiences that are associated with risk for decline in relationship quality? Exploratory analyses were conducted on a subset of the sample that did not receive the intervention. The aim was to find a risk indicator, a family of origin variable, that was associated with a decline in relationship quality in the absence of a preventive intervention. Seven variables reflecting aspects of family of origin experiences were selected as predictors: parental divorce, parental death before age 18, perceived quality of parental marriage during childhood (through age 12) and during adolescence (through age 18), conflict in family of origin (through age 18), perceived parental psychopathology, and perceived quality of relationship with parents during childhood (through age 18). To limit the number of predictors, couple scores were used for the family of origin variables, that is if one of the partners scored positively on the variable, the couple was considered "at risk" for that particular variable. For regression analyses, Stevens (1986) recommends a variable to subject ratio of 5 to 1, thus seven predictors is an acceptable number for the sample size of the present study. The relationship of these predictors with relationship quality, a composite of marital satisfaction

(MMQ), problem solving ability (IPSI) and relational efficacy (MAP) was examined. Because of the high correlation between male and female partner scores, a couple score for relationship quality was used.

Description of Family of Origin Variables

Twenty-seven couples had one partner with divorced parents, 10 couples had at least one partner who experienced parental death before age 18, and 19 couples reported at least one parent with a psychiatric history. The mean rating on perceived quality of relationship with parents during childhood was 2.3 (SD= 1.04, range 1-5, with 5 being the highest quality and 1 the poorest). The mean rating of perceived parental marital quality during childhood was 3.3 (SD=1.7, range 1-7, with 7 being the highest and 1 the poorest). The mean rating of perceived parental marital quality during adolescence was 2.3 (SD=1.5, range 1-6). The Conflict Scale of the FES was used to measure perceived conflict in family of origin (through age 18) and resulted in a sample mean of 6.5 (SD=2.4, range 2-11, with 11 being the highest level of conflict) (Note, this scale was reversed for analyses in order to be consistent with other scales).

At Time 1, none of the seven variables were significantly related to current relationship quality with the exception of perceived quality of relationship with parents, in which poorer relationship quality currently was significantly related to perceived poorer quality of relationship with parents during childhood. See Table 9.11.

Table 9.11
Correlations of family of origin variables (risk indicators) with decline in relationship quality for the subsample that did not receive the intervention

	relationship quality	decline in relationship quality (residual change)	
	T1	T1 -> T2	T1 -> T3
parental divorce	-.18	.23	.15
parental death	-.11	.07	.07
parental psychopathology	-.13	.19	.50*
poor parent-child relationship quality	.34*	-.17	.10
poor parental mar quality at childhood	.15	.49**	.05
poor parental mar quality at adolescence	-.06	.15	-.04
family conflict	.26	.26	.09

* $p < .05$
** $p < .01$

Family of Origin Variables and Decline of Relationship Quality over Time

The prognostic value of the set of family of origin variables to predict decline in relationship quality over time was examined next. To denote change over time, residual change scores were used. A residual change score is the raw change score minus the decline to be expected on the basis of the regression of Time 1 to Time 2 score (see Cronbach & Furby, 1970; Fiske, et al., 1970; Mintz, Luborsky, & Christoph, 1979; Steketee & Chambless, 1992). This method of calculation is preferable to raw change scores which are known to be unreliable.

Of the seven variables, only perceived poor parental marital quality during childhood ($r=.49$, $p<.01$) was significantly correlated with a decline in relationship quality over the nine month period between Time 1 and 2. See Table 9.11. A stepwise multiple regression analyses was conducted, which revealed that perceived poor parental marital quality sufficed to explain variance over time and no other variables could explain additional variance in decline in relationship quality at Time 2 to a statistically significant degree. Analyses were run again on the same set of variables to examine change from Time 1 to Time 3. At Time 3, only perceived parental psychopathology was significantly correlated with a decline in relationship quality ($r=.50$, $p<.05$). See Table 9.11. Again, a stepwise multiple regression analyses was conducted, which revealed that no additional variables were significantly associated with a decline in relationship quality at Time 3. Thus, combining the seven family background variables did not contribute any substantial explanatory power to the risk indicator already found at Time 2 as well as at Time 3.

Next, the total set of predictors were analyzed in a "forced entry" multiple regression. Together they yielded a multiple $R = .55$, explaining 30% of the variance in decline in relationship quality at Time 2 [$F(7,35)=2.19$, $p=.06$]. The same analysis was conducted for Time 3 and the seven variables yielded together a multiple $R = .42$, explaining 18% of the variance in residual change in relationship quality at Time 3, which was not significant [$F(7,35)=1.1$, $p=.38$].

The two newly identified risk indictors related to a decline in relationship quality were further examined for the whole sample to test whether participation in the intervention served as a protective factor for a decline in relationship quality. First, two groups were distinguished: Couples for which (at least) one partner reported experiencing poor parental marital quality during childhood and couples in which both partners reported experiencing high parental marital

quality during childhood. Both groups were further subdivided as to whether or not they participated in the intervention or not. The mean relationship quality of the four groups were compared at Time 1 and 2 with repeated measures ANOVA with two within factors (gender, time) and two between factors (high/low parental marital quality and yes/ no participation in the intervention). Not surprisingly, results of the ANOVA revealed a significant interaction between time and perceived parental marital quality [$F(1,49) = 6.00$, $p = .018$]: The relationship quality of couples that reported poorer perceived parental marital quality declined more over time than those that reported higher perceived parental marital quality. However, there was no significant three-way interaction between perceived parental marital quality, time and participation in the intervention [$F(1,49)=0.13$, $p = .715$): Participation in the intervention did not appear to be a protective against the risk indicator at FU I.

A similar analysis was performed with perceived parental psychopathology as grouping variable over three time points: 1, 2, 3. As expected, the interaction between perceived parental psychopathology and time is significant [Faver $(2,58)=3.33$, $p = .04$]. Adding the factor intervention to the analysis did not yield a significant three-way interaction [Faver $(2, 58) = 0.57$, $p = .571$]: participation in the intervention did not protect for the negative effect of parental psychopathology on decline in relationship quality over time at FU II.

DISCUSSION

This study is important in that it is the first report of an evaluation of a preventive intervention for couples with a risk group focus. The study also offers cross cultural data on the implementation and evaluation of a Dutch version of the PREP program. In the present study, the effects of the preventive intervention were evaluated at a nine month and two year follow-up. No positive or negative effect of the preventive intervention is demonstrated thus far. Though it is too soon to draw definite conclusions (less than two years after participation in the program), a few preliminary considerations are identified.

Overall, couples in the intervention condition did not differ significantly at FU I or FU II from the control and decline conditions on self-report variables. Interestingly, however, the couples that participated in the intervention did not

report being more positive about their relationship at FU I, actually more negative. For example, they reported higher ratings of problem intensity than control couples over time. Participation in the intervention itself may have increased awareness of relationship problems. A required aspect of each session of the intervention was to find a problem to discuss during the session. Thus, participants received a great deal of practice in formulating relationship problems. It was observed that couples at the start of the training often had difficulties selecting a problem to discuss but became more efficient at it as the training progressed. Perhaps a shift took place sensitizing partners to relationship difficulties present and thereby leading to more negative evaluations.

The pattern of increases in negative evaluations by intervention couples was not hypothesized, but is nevertheless an important outcome for "happy" couples to consider before participating in a preventive intervention. The increase in negative evaluations does not necessarily need to be conceptualized as a negative effect, perhaps even positive if it reflects open expression of negative aspects of relationship functioning. Gottman and Krokoff (1989) provide data on denial at Time 1 being predictive of marital distress several years later, whereas more open expression of anger was related to less distress. If participation in the intervention had a negative effect on couples and individual well-being, however, then the present findings raise an ethical issue of intervening in stable "happy" relationships. The issue raised here is especially relevant in the present study in which couples were together an average of six years, longer than in Markman's study of premarital couples, who were together an average of 2.5 years at the start of the study. Not only did couples report being more negative about their relationship, reports of individual well-being were similar, that is intervention couples reported greater health symptoms than controls and higher dissatisfaction with life in general than decline couples at FU I. It is critical for preventionists to be able to respond to this concern, and speaks to the need for more research addressing interventions with subtypes of "happy" couples as well as on the use of preventive interventions at different stages of relationship development. The present Dutch sample is a good example of a different pattern of relationship development than in the US. Government statistics show a pattern in which couples in Holland tend to first cohabitate and once they have children then they get married (Central Bureau of Statistics, 1991). The average age when couples marry is somewhat older than in the US: for males 29.1 and females 26.9 (Centraal Bureau voor Statistiek, 1995).

Because of the limited time frame of the study, relationship quality was emphasized more than stability in the outcome evaluation. The number of break-ups are reported, though it is too early to draw any conclusions about stability over time given the small number. By FU I, two couples had broken up. These two break-ups are intriguing since both participated in the intervention. It appears the two couples may have used the intervention as a way of deciding whether or not to continue their relationship. One could argue that this "testing out" the relationship at an early stage is also "preventive". However, that was not the intent of the present evaluation, where break up is conceptualized as a negative outcome. The couples were together for a short number of years and not living together. Deciding to end their relationship may also be reflective of a lower commitment to working on the relationship. By FU II, five couples had broken up: three intervention and two control couples. Further follow-ups are needed to determine whether or not participation in the intervention is related to stability over time.

The results of the self-report data do not indicate any short-term benefits for couples who participated in the intervention. In contrast to our findings, Markman et al. (1986; 1987; 1988; 1993) do find a few indications of positive short-term and long-term benefits for intervention (vs. control but less so for decline) couples in their follow-ups on self-report data as well as on observational data. They also report that over time the break up rate of intervention couples is much lower than that of controls. Their findings reflect the importance of longitudinal data. Hahlweg and his colleagues also evaluated a version of PREP in Germany and report little differences on self-report variables but find differences in observed communication behavior, with intervention couples demonstrating more positive communication behavior than controls (Hahlweg, Thurmair, Eckert, Engel, & Markman, 1992). This finding indicates that new skills were learned by intervention participants but perhaps did not influence relationship evaluations.

In contrast to the studies of Hahlweg and Markman, the present study focused on high vs. low risk couples (Van Widenfelt, Schaap, & Hosman, 1991). Analyses were conducted to examine a subset of couples who were identified as at risk for relationship distress and dissolution at Time 1, based on one partner having divorced parents. Overall, few differences were found between couples with and without divorced parents initially. However, at the nine month follow-up parental divorce couples demonstrated a significant increase in

problem intensity, and a trend toward decreased problem solving ability and relational efficacy, whereas couples from intact families of origin showed the opposite pattern. Furthermore, couples from intact families showed improved health over time, whereas the health of couples with divorced parents remained stable or became somewhat worse (measured with the SCL-90). At FU II, there were no longer significant differences present between parental divorce and intact family couples. Participation in the preventive intervention did not appear to have a protective influence on decline in relationship functioning for persons who experienced parental divorce and their partners. As mentioned in the Method section, all analyses used the couple as the unit of analyses because of interdependent data. One could argue that such an analyses obscures differences on an individual level. Since it is indicated in the literature that there are gender differences in the influence of parental divorce on offspring, analyses were redone contrasting males with parental divorce to males from intact families (who had their partners from intact families) and the same for females. The pattern of results was similar to the couple data: No interaction was found between gender, time, PD and the intervention.

The findings bring several aspects of the study into question: how risk is defined, selection effects, the influence of Dutch culture, and the appropriateness of the intervention for the targeted high risk couples. In the present sample, it can be questioned whether parental divorce was a good indicator of risk for decline in relationship quality, though a few outcome variables did indicate a decline. Since having divorced parents is quite a general risk indicator for relationship functioning in offspring, we were interested in what other aspects of family of origin experiences may have a prognostic value for future relationship decline. The association of seven family of origin predictors to a decline in relationship quality over time were examined in an exploratory analyses of the subsample that did not receive the intervention. Together these seven variables accounted for 30% of the variance in decline in relationship quality at FU I and 18% at FU II. Results further revealed that perceived poor parental marital quality was significantly related to a decline in relationship quality at FU I. Additional analyses revealed perceived parental psychopathology to be significantly related to a decline in relationship quality at FU II. ANOVA's were conducted to see if couples identified as at high risk based on the newly identified family of origin variables (perceived poor parental marital quality and parental psychopathology) would benefit more from the preventive intervention than

those identified as low risk. Again no significant interactions between risk indicators and participation in the preventive intervention were found. Apparently, participation in the intervention did not serve as a protective factor for decline in relationship quality on the short-term. As with parental divorce, it may be that not enough time has passed to obtain clear the effects.

A more thorough assessment of family of origin variables may offer more accurate risk information, which takes into account both risk and protective factors. For example, in the present study, parental remarriage was not taken into account, which may serve as a protective factor in some cases. As mentioned in the introduction, there are also numerous other indicators of high risk that can be drawn from the literature.

Another factor to take into consideration when interpreting the results of this study is the possibility of a selection bias in recruitment. Couples who participated in the present study were all volunteers responding to media announcements. It may be that in the present sample couples who experienced parental divorce had "worked through" the possible negative long-term effects associated with divorce. Perhaps the couples "in need" did not participate in the present study, and are in general less likely to participate in such a prevention program. Participation in itself may be an indication of both partners willingness to examine their relationship and learn something new. The couples that did participate in the present study in which one partner had divorced parents did not appear to be at much higher risk than control couples for poorer relationship functioning (see Chapter 7 as well). Further, they did not appear to benefit more from the intervention than controls. Thus, carefully choosing a risk group and assessing it's "representativeness" is critical to such an evaluation as the present one.

The present study also suffered from a selection bias in who agreed to participate in the intervention. Analyses reveal that the couples who declined participation differed from the intervention couples in years together. That is, they were not together nearly as long as the intervention couples. Further the couples who declined the intervention did not report to be as sexually distressed as the intervention couples. This selection effect may limit the generalizability of the effects of the intervention program.

In addition to possible selection bias due to recruitment efforts or decline of the intervention, the effect of which couples participated in the follow-ups is also important to consider. Since the attrition rate was considerable (18% at FU I

and 48% by FU II), the results may be affected by this phenomenon. Analyses reveal that the couples who did not complete the follow-up's evaluated their relationship more negatively at Time 1 than follow-up completers. Especially control and decline couples did not complete the follow-ups, which is not surprising since they did not receive the intervention and may have felt less committed to the study. Couples furthermore were not rewarded financially or otherwise for their continued participation. Many couples reported experiencing the first assessment as quite exhausting which may have discouraged their continued participation, especially if they were feeling more negative about their relationship. It is possible that the hypothesized worsening of the control and decline conditions compared to the intervention is disguised by the high drop out rate. The need for rewarding and continuing efforts to engage controls and declines is highlighted here.

As already mentioned, the pattern of relationship development appears to differ in the Netherlands from the US. Another aspect of relationships that appears to differ in Dutch and American couples is that of gender roles. Van Yperen (1990) examined cross national differences and found Dutch couples to be more "feminine" and American couples to be more "masculine" in terms of their relationship values. For example, Dutch couples showed less sex-role stereotypes than their American counterparts. This reported cultural difference may offer an explanation of the lack of gender differences found in the present study.

Lastly, another interpretation of the lack of protection the intervention appeared to provide the parental divorce couples on the short-term is that the intervention may not be adequately tailored to for the high risk population. The intervention consisted of basic ingredients of cognitive behavioral interventions addressing relationship well-being. One session was added that focused on family of origin, in which a genogram was used to assist couples in identifying patterns of communication, and expectations or beliefs about relationships that may have originated in their family of origin. This session together with the rest of the sessions was perhaps insufficient in addressing the specific needs of adult children of divorce and their partners.

Implications for Future Research

A more complex picture of risk is recommended for future program evaluation studies. Other risk indicators instead of or in addition to parental

divorce could be examined. A combined set of variables, could not only consist of "high risk" background variables, but protective factors as well. An alternative suggestion to the present focus on family background is that it may be more useful to develop a risk profile of couples based on current aspects of functioning rather than based solely on their past relationship experiences. Thereby offering more "current" information about risk rather than relying on retrospective reports, which would be just as easy to assess, if not easier. Again, protective factors in addition to risk indictors should be assessed. Focusing on current functioning would also address the issue of the validity of retrospective reports about earlier family experiences. Couples could be assessed/screened to see if they actually are at increased risk for relationship distress and dissolution. A more thorough risk assessment could also be useful in tailoring the intervention more closely to the needs of the risk population. For example, partners who have experienced parental divorce may have special needs that were not addressed in the intervention used in the present study.

An inclusion of an attention only control group is also recommended for future evaluation studies in order to be able to conclude specific effects of the intervention (vs. a general benefit of participation in an intervention). Such a design could aid in identifying which interventions and ingredients are the most effective for preventing relationship distress and divorce. One study by Susan Blumberg (1991) compared PREP with another intervention, Engaged Encounter (EE) and found that all couples demonstrated decreased ratings of problem intensity and increases in commitment, perhaps indicating a more general impact of participating in a prevention program. However, couples that participated in PREP showed significant improvements in communication and relationship satisfaction compared to the EE couples.

In sum, the potential negative effects of early intervention must be ruled out and the potential positive effects must be confirmed. Research still needs to be conducted on developing the most cost and time efficient and effective approach to prevention for specific subpopulations. Future research needs to clarify whether a specific preventive target is a realistic and profitable goal. Such research is critical before larger scale interventions can be recommended.

Discussion and Conclusion

This final chapter of the manuscript gives a summary of the findings and attempts to draw relevant conclusions and implications of the present research.

OVERVIEW

The goals of this dissertation were to (1) understand the relationship between gender, observed communication and relationship distress; (2) investigate the psychometric properties of a measure of relational efficacy in a Dutch population; (3) describe the relationships of adults from divorced parents and their partners using self-report and observational measures; (4) outline the process of developing a controlled evaluation of a preventive intervention; (5) carry out and evaluate a preventive intervention with couples identified at risk for relationship distress and divorce.

COMMUNICATION, RELATIONSHIP SATISFACTION AND GENDER

In the first phase of the current project, we conducted a study using observed communication behavior (reported on in Chapter 5). It was hypothesized that the gender differences in couple's communication as described in the literature would be more pronounced if couples were more distressed. The hypothesis was not confirmed. Interestingly, sequential analyses of the communication data revealed clear differences in patterns of communication between distressed and nondistressed couples. However, gender stereotyped patterns, such as the demand-withdrawal pattern were found to characterize distressed couples, regardless of gender. One gender difference in communication was found, that is, females used more emotional invalidation (e.g., criticism) than males. Nonetheless, when patterns of communication were studied, emotional invalidation did not lead to other negative behaviors in nondistressed couples, whereas it did in distressed couples (regardless of gender.) Thus, distress was a better discriminator of communication behavior than gender. The current study also demonstrated that gender differences are not necessarily related to relationship distress.

In Chapter 6, a measure of relational efficacy, the Marital Agendas Protocol (MAP) is described. The MAP appears to be a reliable and valid instrument to use with Dutch couples for both research and clinical purposes. The validity of the MAP was supported by the finding that distressed couples reported overall significantly lower relational efficacy than nondistressed couples. Distress appeared to be a more important factor associated with relational efficacy than gender. A marginally significant interaction suggests female's report of

relational efficacy is associated with relationship distress more than men's. This may reflect the notion that women are the barometer of the relationship, that is they are better at gauging and reporting on the current 'pressure' of the relationship. Further, no significant differences between males and females on relational efficacy were found.

Ratings of problem intensity of twelve problem areas revealed differences between distressed and nondistressed couples. Distressed males top problem areas were: (1) communication, (2) sex and (3) role division. For nondistressed males the ranking was different: (1) money, (2) sex, (3) role division. For distressed females, top three problem areas were the same as distressed males: (1) communication, (2) sex, and (3) role division. For nondistressed females the top three problem areas were: (1) in-laws, (2) sex, and (3) role division. Thus, for happy couples, money and in-laws takes precedence over communication. It appears that as long as couples are arguing about money and in-laws, their ratings of relationship satisfaction are quite high. However, when couples are arguing about arguing itself (i.e., communication), their ratings of relationship satisfaction are low.

RISK AND PREVENTION

Based on the literature on risk indicators for relationship distress and divorce, we chose to study couples in which one partner has divorced parents. The long-term negative consequences of divorce on offspring have gained greater attention over the last years in both the popular and research literature. Yet, little is known about the relationship functioning of the adult offspring. In Chapter 7 the relationships of adults who experienced parental divorce (PD) and their partners are compared with couples from intact families of origin (IF) on a number of relationship dimensions, both self-report and observed. We hypothesized that PD and their partners would demonstrate more negative communication as well as more negative evaluations of their relationship, (e.g., lower relational efficacy.) Results revealed, however, that there were little differences between PD and IF couples on self-report relationship variables nor on observed communication behaviors during a problem-solving task. In fact, differences in the opposite direction of the hypotheses were indicated upon inspection of the means. PD couples rated their relationships more positively than IF couples. In terms of communication behavior, females of PD

demonstrated significantly more problem solving facilitating statements than females of IF and there was a trend for males of PD in the same direction.

There are a number of possible reasons that the hypotheses were not confirmed. First of all, the composition of the sample and recruitment strategy must be taken in to account. Couples were recruited through advertisements on a study on communication and relationship development and the severely distressed couples that did respond were excluded from analyses leaving non to mildly distressed couples for the risk and prevention study. Thus, the present sample consisted of generally healthy, happy couples. This is in sharp contrast to, for example, the study of Judith Wallerstein, in which a clinic sample was used. Further, the present study was controlled, whereas the study of Wallerstein was not, which may additionally explain the difference in our findings with hers. These notions are supported by Amato and Keith (1991) who reviewed the literature on adult children of divorce and concluded that negative effects were stronger when clinic samples were used and studies were uncontrolled. The findings of the present study also confirm the notion that divorce is a varied experience and should not be too quickly generalized about. The PD couples in the present study demonstrated healthy and positive relationship functioning. Perhaps in the present sample protective factors were operating that would be worthy of future investigation.

One of the first steps of developing a controlled evaluation of a preventive intervention is to identify a risk group. We reviewed the literature (Chapter 2) and chose adults who experienced parental divorce and their partners as a risk group for relationship distress and divorce. Couples from intact families served as a control group. We purposefully only included those couples that were not severely relationally distressed since we were interested in preventing serious relationship distress (and break up). Next, we reviewed key program elements and selected the program of Howard Markman and his colleagues as a model program. We developed a manual for trainers and couples to use. Program elements and delivery were adapted to the Dutch culture and the group of couples who would participate. We struggled through many issues related to motivating couples for participation through creative recruitment strategies, as well as a series of ethical issues related to preventive interventions (see Chapter 8). Throughout these steps we tried to adhere closely to the criteria for effective prevention programs outlined by Richard Price and his colleagues in the United

States and Clemens Hosman and his colleague, Mark Bosma, in the Netherlands. A summary of the steps we took can be found in Chapters 2 and 8.

The evaluation of the preventive intervention at nine months (FU I) and a two year follow-up (FU II) was first conducted on the entire group of couples regardless of risk status. Overall there were no significant differences between intervention, control and decline couples, with one exception: at FU I problem intensity increased for the intervention group and decreased for the control and decline group. This may have been an effect of the constant focus during the intervention of selecting real problems to discuss in order to gain experience with the newly taught skills. This perhaps increased the awareness of having problems.

Next, analyses were conducted to investigate possible associations to parental divorce status. As already mentioned, at Time 1 there were no significant differences as hypothesized between PD and IF couples. However, at FU 1 we did find several differences. At FU I, problem intensity increased over time for the PD couples and decreased for the IF couples. There was also a trend for problem solving ability and relational efficacy to decrease for PD couples and increase for the IF couples. Further, health symptoms (SCL-90) decreased over time for the IF couples and increased somewhat or remained stable for the PD couples. The intervention, however, did not appear to have any protective influence in this time frame as there were no significant interactions between time, group, and PD status. At FU II there were no statistically significant differences between groups over time nor any significant interactions. Because of the limited amount of time that has passed, it is not possible to draw any conclusions about break ups (by FU II, three intervention and two control couples broke up). Thus, in the first two years, the prevention program does not demonstrate any significant protection for couples at risk.

We were interested if perhaps other family of origin variables were associated with risk for decline in marital quality and we therefore conducted exploratory analyses on a subset of the sample that did not receive the intervention. See Chapter 9. Of the seven family of origin variables examined, only perceived poor parental marital quality during childhood was significantly correlated with a decline in relationship quality in the nine month period from Time 1 to Time 2. From Time 1 to Time 3, only perceived parental psychopathology was significantly correlated with a decline in relationship quality. With the two newly identified risk indicators, analyses were conducted

to evaluate the protective effect of the intervention with these couples. Results revealed, however, that participation in the program did not appear to have a protective effect on decline in marital quality at FU I or FU II.

Thus, no protective or negative effect of the preventive intervention is demonstrated within the first two years of the program. It is too early to draw definite conclusions about the effectiveness of the program given that not enough time has passed for a proper evaluation. A few considerations are in order, none the less. It may be that parental divorce is too global of a risk indicator for identifying couples that will benefit from a prevention program. Risk as defined by several risk indicators rather than just one may be more productive. Given the recruitment strategy of the present study, couples truly in need may not have responded to our efforts. Future research may benefit from trying to reach couples through other avenues (e.g., through general practitioners or Primary care clinics). Perhaps secondary prevention, where couples are already showing some signs of distress may attract more couples in need of an intervention as well as directly advertising the intervention (which was not done in the present study). Furthermore, it is suggested for future research to include not only risk factors but also protective factors for identifying couples at risk. Finally, to really be assured a couple is at risk it may make more sense to assess current risk status (versus risk history).

The design of the present study strongly resembles that of Markman's. Similar measures were used and a similar form of controlling the quality of the intervention. A few differences do exist, such as the focus on a risk group, use of a Dutch (vs. American) sample and a tighter control excluding distressed couples. Additionally, Markman had a higher rate of couples decline participation in the program than in the present study, perhaps showing a higher rate of selection bias in his study. Despite the differences, overall the two studies are quite similar and thus it may seem surprising that the findings on the present prevention evaluation appear to diverge from the positive effects Markman reports. However, in Markman's early evaluations of his program, he also found little differences between groups using self-report measures. This is further consistent with Hahlweg's reports on a similar evaluation in Germany. He also found observational measures to reveal differences that self-report measures did not. It was only over the longer term that Markman found clear differences to reveal themselves (e.g., rates of break ups). Thus, a longer term evaluation is needed in order to draw final conclusions about the program effects.

In sum, the present study contributes to the literature on gender differences, adding clarification to the relationship between gender, communication and distress. Furthermore, a number of new instruments are introduced for use in the Netherlands such as two measures of Cliff Notarius: the Codebook of Marital and Family Interaction for coding observed communication and the Marital Agendas Protocol, for measuring relational efficacy. New descriptive data on the relationships of adult children of divorce is offered. Lastly, the steps in carrying out, implementing, and evaluating a preventive intervention for couples at risk is demonstrated, making it clear that setting up and carrying out a preventive intervention is a large undertaking. Before such an intervention can be implemented on a larger scale, the potential positive effects must be documented as well as the absence of negative effects.

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NEDERLANDSE SAMENVATTING [SUMMARY IN DUTCH]

De doelstelling van het onderzoek dat wordt gepresenteerd in dit proefschrift was in de eerste plaats om de relatie tussen sexe, communicatie en relatieproblemen te onderzoeken. Een tweede doel was om psychometrisch onderzoek te verrichten bij een schaal voor het meten van relationele 'efficacy'. Ten derde was dit onderzoek gericht op het bestuderen van de relatie van paren waarvan één partner een ouderlijke scheiding had meegemaakt, met behulp van zelfrapportage maten en gegevens verkregen door observationeel onderzoek. Een vierde doel was een beschrijving te geven van de ontwikkeling van een programma ter evaluatie van een interventie gericht op preventie. Ten slotte kan als vijfde doel aangemerkt worden de uitvoering van een studie waarin het effect werd geëvalueerd van de preventieve interventie bij een populatie paren met een hoog risico voor relatieproblematiek en echtscheiding.

COMMUNICATIE, RELATIESATISFACTIE, EN SEXE

De eerste fase van het project is een studie naar communicatie patronen aan de hand van geobserveerd gedrag. De verwachting was dat sexeverschillen op het gebeid van communicatie meer op de voorgrond zouden treden, naarmate een (echt)paar meer relatieproblemen had. Er werd geen bevestiging voor deze hypothese gevonden. Sequentiële analyse van de communicatiegegevens bracht wel duidelijke verschillen in de wijze van communiceren aan het licht tussen paren met en zonder relatieproblemen. Zo werd bijvoorbeeld een stereotiep patroon als "trek-terugtrekken" meer gevonden bij paren met relatieproblemen dan bij andere paren, echter in gelijke mate bij mannen als bij vrouwen. Er werd een duidelijk sexe verschil aangetroffen: vrouwen waren meer geneigd tot "emotional invalidation" (bijvoorbeeld kritiek geven). Wanneer echter het patroon van communicatie werd bestudeerd, dan kwam naar voren dat onder paren met relatieproblemen emotional

invalidation leidde tot een negatieve reactie, wat in mindere mate het geval was bij paren zonder relatieproblemen. Derhalve was het wel of niet hebben van relatieproblemen belangrijker dan sexe als bepalende factor voor de wijze waarop het paar communiceerde. In deze studie werd tenslotte ook gevonden dat sexe verschillen niet gerelateerd zijn aan relatieproblemen.

In hoofdstuk 6 wordt onderzoek gepresenteerd naar een relationele 'efficacy' schaal, de Marital Agendas Protocol (MAP). De MAP blijkt een betrouwbaar en valide instrument te zijn dat bruikbaar is bij Nederlandse paren voor zowel onderzoeksdoeleinden als voor klinisch gebruik. De validiteit van het instrument werd ondersteund door de bevinding dat paren met relatieproblemen in het algemeen een lagere relationele 'efficacy' score hadden dan paren zonder relatieproblemen. Relatieproblemen vertoonden een sterker verband met de relationele 'efficacy' score dan sexe. Een marginaal significante interactie tussen sexe, relationele 'efficacy' en relatiesatisfactie suggereert dat bij vrouwen de relationele 'efficacy' sterker verband houdt met de tevredenheid met de relatie dan bij mannen. Dit zou een afspiegeling kunnen zijn van het feit dat vrouwen beschouwd kunnen worden als de barometer van de relatie en dat zij beter dan mannen in staat zijn om het klimaat of de weersgesteldheid in de relatie te beoordelen. Verder werden er geen sexeverschillen in de beoordeling van de relationele 'efficacy' gevonden.

De beoordeling van de intensiteit van twaalf probleemgebieden in de relatie, een ander aspect dat gemeten wordt door de MAP, bracht verschillen aan het licht tussen paren met en zonder relatieproblematiek. De voornaamste probleemgebieden voor de mannelijke helft van paren met relatieproblematiek waren (1) communicatie, (2) sex en (3) taakverdeling. Voor mannen van paren zonder relatieproblematiek waren de voornaamste problemen: (1) geld, (2) sex en (3) taakverdeling. Voor de vrouwelijke helft van paren met relatieproblematiek gold dezelfde volgorde als voor de mannen: (1) communicatie, (2) sex en (3) taakverdeling. Voor vrouwen van paren zonder relatieproblematiek waren de belangrijkste drie probleemgebieden (1) schoonfamilie, (2) sex en (3) taakverdeling. Uit deze gegevens komt naar voren dat bij gelukkige paren geld en schoonfamilie belangrijker zijn als probleemgebied dan communicatie. Het lijkt erop dat wanneer paren ruziën over geld en schoonfamilie hun tevredenheid met de relatie hoog is. Echter, wanneer er voornamelijk geruzied wordt over het ruziën zelf (communicatie), dan gaat dat samen met een lage tevredenheid met de relatie.

RISICO EN PREVENTIE

Na bestudering van de literatuur met betrekking tot factoren die een risico inhouden voor relatieproblemen en scheiding, werd besloten om paren waarvan op zijn minst één van de partners gescheiden ouders had nader te onderzoeken. Zowel in populaire publicaties als in vakliteratuur is er een toenemende belangstelling voor de negatieve gevolgen op de lange termijn van de scheiding van ouders voor hun kinderen. Er is echter maar weinig bekend over het functioneren van de relaties van deze kinderen in hun latere leven, wanneer ze zelf volwassen zijn geworden. In hoofdstuk 7 worden de relaties van echtparen met een geschiedenis van scheiding van de ouders (Parental Divorce; PD) op een aantal relevante dimensies vergeleken met de relaties van echtparen zonder ouderlijke scheiding (Intact Families; IF). Hierbij wordt gebruik gemaakt van zowel zelf-rapportage als observationele gegevens, die werden verkregen gedurende een probleem-oplossingstaak. De verwachting was dat bij PD paren meer negatieve communicatie aangetroffen zou worden en dat zij een meer negatieve kijk op hun onderlinge relatie zouden hebben dan IF partners. Uit de resultaten kwam naar voren dat er maar zeer geringe verschillen waren tussen PD en IF paren. Dat gold zowel voor de zelfrapportage gegevens als voor de data van het geobserveerde gesprek van de paren. Bij de gemiddelden werden zelfs enige verschillen gevonden die tegengesteld waren aan de verwachting. PD paren rapporteerden meer tevredenheid over hun relatie en in communicatie gedrag waren het de vrouwen van PD paren die meer probleem-oplossende uitspraken deden dan de vrouwen van de IF paren. Voor de mannen was er een trend in dezelfde richting.

Er zijn een aantal redenen naar voren te brengen voor het ontbreken van ondersteuning voor de hypotheses. Ten eerste is het van belang om de samenstelling van de steekproef in aanmerking te nemen. De paren werden geworven door middel van advertenties voor een studie "over de communicatie en ontwikkeling van de partner relatie". Paren met relatieproblemen werden uitgesloten van deelname aan de studie. Derhalve bestond de steekproef uit in het algemeen gezonde en gelukkige paren. Dit staat in scherpe tegenstelling tot de groep in het onderzoek Judith Wallerstein, wat bij een klinische populatie werd verricht. In dit onderzoek waren wel negatieve consequenties naar voren gekomen van ouderlijke scheiding voor de relatie van PD paren. Verder had de huidige studie een gecontroleerde opzet, terwijl de studie van Wallerstein ongecontroleerd van opzet was, wat mogelijk ook het verschil in uitkomst tussen beide studies kan verklaren. Ondersteuning voor deze

gedachtengang kan ook gevonden in een literatuuroverzicht van Amato en Keith (1991). Zij concludeerden dat negatieve effecten van de scheiding van ouders meer naar voren waren gekomen bij onderzoek onder klinische populaties en in ongecontroleerde studies dan in gecontroleerde studies. De bevindingen van de huidige studie ondersteunen ook de opvatting dat scheiding een gebeurtenis is met zeer uiteenlopende gevolgen waar men geen generaliserende uitspraken over kan doen. De PD paren in de huidige groep hadden gezonde en positieve intieme relaties. Mogelijk waren er bij deze paren beschermende factoren werkzaam, die nadere studie vergen.

Een van de eerste stappen in de ontwikkeling van een gecontroleerde evaluatie van een preventieve interventie is het onderscheiden van een risico groep. Na bestudering van de literatuur werd besloten om scheiding van ouders als een risico factor voor relatieproblemen en scheiding te beschouwen. Als controlegroep werden paren zonder scheiding in hun ouderlijke familie uitgekozen. Met opzet werden voor de studie alleen paren zonder ernstige relatieproblemen geselecteerd omdat de interventie tot doel had dergelijke relatieproblemen te voorkomen. Vervolgens werden de belangrijkste elementen geïnventariseerd uit het preventieprogramma van Howard Markman en collega's en werd een keuze gemaakt uit hun interventies om een programma samen te stellen. Er werd een handboek ontwikkeld voor trainers en de paren. Onderdelen van het programma en de presentatie werden aangepast aan de nederlandse cultuur en aan de doelgroep. In hoofdstuk 8 zijn een aantal van de moeilijkheden beschreven rond werving, motivering van paren en ethische kwesties die voorkomen bij het doen van onderzoek naar preventieve interventies. In het nemen van beslissingen werd getracht zoveel mogelijk te voldoen aan de criteria die opgesteld zijn door Price en collega's in de Verenigde Staten van Amerika en door Clemens Hosman en zijn collega, Mark Bosma in Nederland. Een samenvatting van de maatregelen en procedures is beschreven in hoofdstuk 2 en hoofdstuk 8.

De evaluatie van de preventie training na negen maanden (FU I) en na twee jaar (FU II) is eerst verricht op alle beschikbare gegevens, zonder in aanmerking te nemen of de deelnemers tot de risicogroep behoorden of niet. Over het algemeen werden er geen verschillen gevonden tussen paren die de preventieve interventie hadden ontvangen, paren die niet de interventie was aangeboden en paren die de interventie geweigerd hadden, met één uitzondering: ten tijde van FU I bleek er een toename te zijn van de intensiteit van problemen in de interventie groep, terwijl in de controle groep en in de groep van weigeraars een afname was van intensiteit van

problemen. De toename van problemen zou veroorzaakt kunnen zijn door de voortdurende aandacht in de interventie groep op het selecteren van problemen die gebruikt werden als oefenmateriaal om nieuwe vaardigheden aan te leren. Dit zou een sterker bewustzijn voor problemen veroorzaakt kunnen hebben.

Vervolgens werd de invloed van ouderlijke scheiding onderzocht. Zoals al eerder werd opgemerkt, waren er bij de voormeting geen significante verschillen gevonden tussen PD en IF paren. Bij de eerste follow-up werden er wel enige verschillen gevonden, over het algemeen in overeenstemming met de verwachting. De intensiteit van problemen nam toe voor de PD paren en nam af voor IF paren. Ook was er een trend in dezelfde richting voor probleemoplossend vermogen en voor relationele vaardigheid: deze nam af bij de PD paren en nam toe bij IF paren. Ten slotte nam zelfgerapporteerde gezondheid (SCL-90) af bij IF paren en nam enigszins toe bij PD paren. Er werd echter negen maanden na afsluiting van de behandeling geen ondersteuning gevonden voor een preventief effect van de interventie. Er waren geen significanten interacties tussen tijd, groep en PD status. Bij de tweede follow-up, na twee jaar werden er geen significante verschillen gevonden tussen de groepen over tijd, en ook geen significante interacties tussen deelname aan de interventie of niet en PD status. Vanwege de korte tijdspanne die is gepasseerd sinds de beëindiging van de preventieve interventie, is het nog niet mogelijk verschillen tussen de groepen te onderzoeken met betrekking tot het aantal paren dat uit elkaar is gegaan. Bij FU II waren nog maar drie paren van de interventie groep en twee paren in de controle groep uit elkaar gegaan. Derhalve kon in de eerste twee jaar na afsluiting geen beschermende invloed van het preventieprogramma aangetoond worden voor paren die een risico lopen op scheiding.

Mogelijk zijn er andere variabelen met betrekking tot de familiaire achtergrond van de partners van belang die een risico inhouden voor een afname van de kwaliteit van de relatie. Om deze mogelijkheid te onderzoeken werden exploratieve analyses verricht op een gedeelte van de onderzoeksgroep dat bestond uit de paren die niet hadden deelgenomen aan het preventieprogramma (zie hoofdstuk 7). Van de zeven variabelen die werden onderzocht was alleen een slechte relatie van de ouders tijdens de kindertijd (zoals gerapporteerd door de respondent) significant gecorreleerd met een afname van de kwaliteit van de eigen relatie in de negen maanden periode van de voormeting tot de meting na negen maanden. Met de afname van kwaliteit van de relatie over de periode lopende van de voormeting tot twee jaar later was ouderlijke psychopathologie geassocieerd. Met deze twee nieuwe

risico factoren die waren gevonden bij deze subgroep werden opnieuw analyses verricht om de preventieve interventies te evalueren. De resultaten gaven echter aan dat deelname aan het preventieprogramma geen beschermend effect had voor een afname in de kwaliteit van relatie na negen maanden of na twee jaar.

Derhalve werd er geen positieve of negatief effect van de preventieve interventie aangetoond binnen twee jaar na afsluiting van het programma. Het is nog te vroeg voor een eindoordeel met betrekking tot de effectiviteit van de preventieve interventie. Het is echter wel mogelijk een paar tussentijdse conclusies te trekken. Het zou goed kunnen zijn dat scheiding van de ouders een te globale risico factor is om paren waarvoor een preventie interventie op zijn plaats is te selecteren. Risico, gebaseerd op een combinatie van meerdere factoren zou een betere benadering kunnen zijn. Verder is het mogelijk dat door de wijze waarop de paren in deze studie werden geworven, paren die de interventie echt nodig hadden niet hebben deelgenomen. In toekomstig onderzoek zou getracht kunnen worden op andere manieren deelnemers te werven, bijvoorbeeld door huisartsen te benaderen. Mogelijk dat secundaire preventie, waarbij paren al enige tekenen van relatieproblematiek vertonen, tot deelname leidt van paren die in sterkere mate behoefte hebben aan het preventieprogramma. Ook kan het zinvol zijn om in toekomstig onderzoek niet alleen aandacht te hebben voor risicofactoren, maar om ook beschermende factoren in de studie te betrekken. Mogelijk levert het meer op om huidige risicofactoren te onderzoeken in plaats van risicofactoren gebaseerd op het verleden. Een hieraan verwante interpretatie van de resultaten is dat mogelijk de preventieve interventie niet voldoende toegesneden was op de problematiek van paren waarvan één partner een ouderlijke scheiding had meegemaakt. Het preventie programma had een vrij algemene strekking en slechts één zitting werd geheel besteed aan de specifieke problemen die paren met een ouderlijke scheiding kunnen tegenkomen. Mogelijk kwam dit onvoldoende tegemoet aan de behoefte van deze paren.

In de huidige studie trad er ongewenste selectie op van paren die deelnamen aan de interventie en paren die het aanbod tot deelname afwezen. Paren die deelname weigerden waren gemiddeld korter samen dan paren die deelnamen. Bovendien hadden weigeraars minder sexuele problemen dan deelnemende paren. Dit ongewenste verschil tussen de beide experimentele groepen maakt dat de resultaten met betrekking tot het effect van de interventie niet zonder meer gegeneraliseerd kunnen worden. Hier komt nog bij dat er een mogelijk effect uitging van selectieve uitval bij het verzamelen van de follow-up gegevens. De uitval bij de

follow-up was aanzienlijk (18% bij de eerste follow-up en 48% bij de tweede follow-up). Uit de vergelijking van voormetingsgegevens van paren die wel en niet deelnamen aan de follow-up kwam naar voren dat paren die deelname aan de follow-up metingen weigerden, over het algemeen negatiever gestemd waren over hun relatie dan zij die wel deelnamen aan de follow-up. Voorts werkten vooral paren die hadden deelgenomen aan de interventie mee aan de follow-up meting en waren paren uit de andere twee groepen ondervertegenwoordigd. Dit is op zich niet verbazend aangezien deze paren zich vermoedelijk minder betrokken bij de studie voelden. Het heeft echter mogelijk de resultaten bij de follow-up vertekend. Er werd in de studie geen financiële beloning voor deelname uitgeloofd. Veel paren rapporteerden bij de eerste meting dat ze de voormeting behoorlijk uitputtend hadden gevonden en dat kan ertoe hebben geleid dat ze van verdere deelname aan meting afzagen. Dit effect zal vooral zijn opgetreden bij paren die zich na verloop van tijd negatiever over hun relatie waren gaan voelen. Deze gedachtengang volgend is het niet onwaarschijnlijk dat de verwachte afname van relatiesatisfactie in de controle- en weigeraars groep verborgen is gebleven door selectieve uitval van paren. Deze suggestie benadrukt het belang van het verschaffen van een beloning voor deelname en van een voortdurende inspanning om de controleparen bij de studie betrokken te houden.

In opzet lijkt deze studie veel op de studie van Markman. Er werd gebruik gemaakt van vergelijkbare meetinstrumenten en op vergelijkbare wijze werd de kwaliteit van de preventieve interventie gegarandeerd. Ook waren er enige verschillen, zoals de aandacht voor een risicogroep, onderzoek onder Nederlandse in plaats van Amerikaanse deelnemers en strengere selectie criteria om paren met ernstige problemen uit te sluiten. Voorts was het aantal personen dat deelname weigerde in Markmans studie groter in vergelijking met de huidige studie, wat mogelijk tot een selekte proefgroep in Markmans studie heeft geleid. De overeenkomsten tussen beide studie zijn echter groter dan de verschillen en het is daarom verbazingwekkend dat in tegenstelling tot Markmans resultaten er in de huidige studie geen positief effect van de preventieve interventie gevonden werd. Hierbij dient aangetekend te worden dat ook Markman in de korte termijn evaluaties van zijn programma weinig verschillen vond tussen de experimentele en de controlegroep op de zelf-rapportagematen. In dit verband is het van belang op te merken dat ook Hahlweg in zijn studie in Duitsland rapporteert dat er alleen verschil op observatiematen werd gevonden en geen verschil op zelf-rapportage maten. Het was pas na geruime tijd dat Markman duidelijke verschillen vond tussen

de preventie groep en de controle groep, bijvoorbeeld in het aantal paren dat uit elkaar ging. Derhalve is voor de huidige studie een evaluatie op een later tijdstip nodig om een definitieve uitspraak te kunnen doen over het effect van het preventie programma.

Samenvattend kan gesteld worden dat deze studie bijdraagt tot een beter begrip over de samenhang tussen sexe, communicatie en relatieproblemen. Verder zijn een tweetal nieuwe instrumenten in Nederland geïntroduceerd: het "Codebook of Marital Family Interaction" voor het coderen van communicatie gedrag en de "Marital Agendas Protocol", een meetinstrument voor relationele 'efficacy'. Beide instrumenten werden ontwikkeld door Cliff Notarius. De huidige studie biedt ook nieuwe descriptieve data met betrekking tot de relatie van volwassenen die een de scheiding van hun ouders hebben meegemaakt. Tenslotte wordt uit deze studie duidelijk dat de ontwikkeling, uitvoering en evaluatie van een preventieve interventie een omvangrijke onnderneming is. Voordat een dergelijke interventie op grote schaal wordt toegepast zou meer duidelijkheid verschaft moeten worden over de positieve en eventueel negatieve effecten.

CURRICULUM VITAE

Brigit van Widenfelt was born on June 25, 1962 in Leiden, the Netherlands. She immigrated to the USA in 1966. In 1983, she received her Bachelor' of Arts degree in Psychology from the University of Denver, Denver, Colorado. In 1986 she entered a Master's/PhD program in Clinical Psychology at the Catholic University of America (CUA), Washington, DC, from which she received a Master of Arts and PhD degree. In 1990, she took a leave of absence from CUA to work in the Netherlands for four and half years at the Department of Clinical Psychology, University of Nijmegen and conducted the present study. She returned to the USA in 1994 and spent a year on Internship at the Baltimore Veterans Administration Medical Center, Baltimore, Maryland. She is currently a Postdoc Research Associate at the University of North Carolina, Chapel Hill.